

Contents

	Foreword	3
1.	Executive summary	4
2.	Why do we need a national strategy?	8
3.	Strategic recommendations	16
4.	Children (0–14s)	22
5.	Young people (15–24s)	32
6.	Adults (25–64s)	40
7.	Older people (over-65s)	48
8.	Making it happen	57
	References	58
•	Appendix 1: Links to other issues on the public health agenda	66
•	Appendix 2: Existing policy drivers	70

Development of the strategy

"Safe and active at all ages: a national strategy to prevent serious accidental injuries in England" was developed by the Royal Society for the Prevention of Accidents (RoSPA), together with members of the National Accident Prevention Strategy Advisory Group (NAPSAG) and contributions from other associated organisations and individuals. NAPSAG has been chaired by the Rt Hon Stephen Dorrell and has consisted of representatives of: Public Health England; Association of Directors of Public Health; Blackburn with Darwen Council; Faculty of Public Health; Institute of Health Promotion and Education;

Institute of Health Visiting; Royal College of Emergency Medicine; Royal College of Nursing; Royal College of Paediatrics and Child Health; Royal Society for Public Health; University of Nottingham; and University of the West of England.

Valuable advice and contributions have also been received from the members of RoSPA's national committees (National Home Safety Committee, National Road Safety Committee, National Occupational Safety and Health Committee, National Safety Education Committee

Foreword

Too many people – at all stages of life – are afflicted by accidental injury in England.

Indeed, accidents are among the leading, but preventable, causes of death, serious injury and long-term disability affecting our population, and they have been increasing in number. Hospital admissions as a result of accidents have also been rising. While we know that accidents can occur at any stage of life, we also know that those most vulnerable to accidental injury are the youngest, oldest and poorest members of our communities.

By their very nature, accidents are unplanned, traumatic and painful for the victims. They cause hardship within families when relatives lose earnings in order to care for their loved ones, and unquantifiable heartache. Employers lose productive employees and the health and social care system incurs significant treatment and rehabilitation costs.

At a time when hospital emergency departments are having to cope with unprecedented levels of demand, it is vital that we recognise the contribution that accident prevention can make to ease the situation.

A tried and tested combination of complementary approaches involving engineering, enforcement and education has brought about significant reductions in accidental injury on our roads and in our workplaces in

recent decades. Yet, such a systematic approach has not been applied to addressing home and leisure accidents, which cause the greatest number of injuries.

This strategy, the production of which has been co-ordinated by RoSPA working with many valued partners over the last two years, aims to redress the balance through advocating a public health approach to accident prevention. Ground-breaking in that it quantifies and addresses the different safety challenges faced across the whole life course, the strategy shows how a greater focus on accident prevention, by a wide range of local and national players, could deliver reductions in accident rates and the associated injury burden.

Fundamentally, it serves as a call to action for a stepchange in the delivery of accident prevention across England, recognising the links between accident prevention and other issues on the public health agenda and highlighting how programmes that seek to reduce accidental injury can also support healthy activity and other indicators of wellbeing.

Rt Hon Stephen Dorrell

Chairman of the National Accident Prevention Strategy Advisory Group

and the National Water Safety Forum), as well as other organisations involved in accident prevention or health and safety more widely, RoSPA staff and trustees.

Thank you to everyone who has been involved. Particular thanks go to the individuals and families whose stories appear in the strategy.









1. Executive summary

Accidents are a leading preventable cause of death, serious injury and long-term disability, which devastate individuals, families, communities and businesses and place a huge burden on our health and social care system, and on society as a whole.

There have been significant reductions in accidental death and injury on the roads and in workplaces, with nationallyled strategic approaches to prevention – featuring a blend of education, engineering and enforcement – being implemented for both road and occupational safety. Home and leisure accidents have not benefited from such rigorous and enduring national strategic approaches, and fatal home and leisure accidents have increased. This increase in home and leisure accident fatalities (particularly falls and accidental poisoning) contributed to an overall rise in deaths from accidents in England from 2013–2016. The age-standardised mortality rate for accidental deaths also followed an upwards trend during this period, although it dropped slightly from 2015–2016. Data from 2012/13–2016/17 also show that hospital admissions as a result of accidents have increased, with a rise in the number of falls being the most significant contributory factor.

Data focuses attention on the leading causes of accidental death and injury; however, the impact of accidents is not just measured in statistics. At the heart of each accident is a person whose life has been affected, at worst lost or irrevocably altered, in an incident that they had not foreseen. Their family, friends, neighbours and colleagues also experience the trauma of the sudden, often violent, event. The impact of accidents is not only physical, but also social, psychological and financial.

Relatively few accidents are wholly new or unforeseeable and the majority are preventable through the application of proportionate safety measures. Interventions should be enabling or empowering, and a risk-averse "cotton wool" approach to safety should be resisted.

Accident prevention is not separate from other issues within England's public health system and there are links to other priority areas, such as encouraging an active lifestyle, reducing air pollution and tackling drug and alcohol use.

While accidents affect people at all ages and stages of life, there are particular challenges relating to the safety of young children and older people in the home, young drivers and young people engaged in leisure activities. There are also significant health inequalities, with the highest accident rates being among those living in our poorest communities.

There are good examples of accident prevention across the country; however, there is little consistency in the quantity and quality of interventions. While recognising that public health, and accident prevention within it, has been delivered at a local level in England since 2012, this strategy aims to inspire action across England, ensuring that priority areas are addressed.

Its aim is: to achieve a step-change in the delivery of evidence-based accident prevention programmes across England, promoting safe and active lives and reducing the burden of serious accidental injury on society.

Its objective is: to secure local and national commitment by a range of stakeholders to implement evidence-based approaches to accident prevention that will reduce the costly burden of accidents on individuals, families, businesses and the health and social care system.

The majority of recommendations are aimed at those with responsibility for setting the accident prevention agenda locally, either in local authorities or the NHS, such as directors of public health, health and wellbeing boards, clinical commissioning groups and elected members with public health portfolios. However, there are also opportunities for those with frontline delivery roles to

play an important part, including: health professionals; those working in education or early years roles; planning and highways departments; and businesses, which are well placed to have an impact on the communities in which they operate. On some issues, national action by government departments and other national organisations is needed.

The following broad themes provide an initial set of five strategic recommendations that have relevance across the life course:

Health inequalities

Recommendation 1: Where there are health inequalities due to links between poverty and injury rates, address these as a priority.

Data collection

Recommendation 2: Ensure that accident-related data collected via the Emergency Care Data Set are made easily accessible to local and national practitioners, enabling them to monitor injury trends, set priorities and evaluate interventions.

Recommendation 3: Establish better accidentrelated data sharing among local agencies, to aid the identification of accident prevention priorities and the subsequent evaluation of interventions.

Safer environments

Recommendation 4: Advocate for the provision of homes that are safer by design.

Recommendation 5: Make meeting the needs of vulnerable road users – pedestrians, cyclists, children and older people – a priority in local planning processes, with particular attention paid to lower speeds in built-up areas and with active travel promoted as a positive option.

The following 20 recommendations have particular relevance to specific age groups:

Children (0-14s)

Strategic co-ordination and capacity-building

Recommendation 6: Ensure that a senior manager is designated the lead for child injury prevention so programmes are delivered in an integrated and systematic way and are supported by an injury prevention strategy and a multi-agency injury prevention group.

Recommendation 7: Support capacity-building through the provision of support and training for practitioners who work with children and families, enabling them to maximise the delivery of safety education for parents and carers, with families at higher risk of injury also being signposted to a home safety assessment and equipment.

Recommendation 8: Develop age-appropriate injury prevention topics for each Healthy Child Programme contact.

Partnership-working on product safety

Recommendation 9: Work in partnership to identify and address emerging issues related to the safety of consumer products and children.

Education and training for children

Recommendation 10: Ensure that children at Key Stages 1 and 2 have opportunities to undertake pedestrian training, with a particular focus on promoting safe and active travel.

A note on terminology

This strategy uses the terms accident, accidental injury and unintentional injury to refer to unplanned (i.e. not deliberate), but often preventable, incidents that result in harm. The accident is the incident that occurs and the accidental or unintentional injury is the harm that results.

Different groups of professionals prefer different terms. Indeed, some of the data sources cited in this strategy give statistics for accidents as a cause of death or injury, while others make reference to unintentional injuries.

The accidents and unintentional injuries referred to in this document are to be distinguished from long-latency health conditions that occur some time after an incident or a prolonged exposure to a harmful agent has ceased, and they also do not include avoidable harms that result from self-harm, suicide, violence or clinical practice.

Recommendation 11: Ensure that the prevention of accidental injuries is a core topic within the new compulsory health education curriculum for all schools.

Recommendation 12: Support the delivery of the UK Drowning Prevention Strategy, with a particular focus on promoting learn-to-swim and water safety education in schools.

Young people (15-24s)

Education and training for young people

Recommendation 13: Act on the findings of the controlled evaluation of approaches to young driver safety (expected in 2020), taking steps towards implementing a graduated driver licensing system if none of the other approaches are found to show the same promise.

Recommendation 14: Ensure that the prevention of accidental injuries is a core topic within the new compulsory health education curriculum for all schools.

Recommendation 15: Support the delivery of the UK Drowning Prevention Strategy, with a particular focus on increasing young people's awareness of everyday risks in, on and around water and incorporating these risks in community-level water safety risk assessments and water safety plans.

Research

Recommendation 16: Research the contributory factors leading to accidental harm to young people who misuse drugs (legal or illegal) and potential preventative interventions.

Recommendation 17: Research the contributory factors leading to accidental falls among young people and potential preventative interventions.

Adults (25-64s)

Utilising the workplace

Recommendation 18: Encourage the collection of data on absence from work that results from accidents that happen away from work – either to workers or those for whom they have caring responsibilities.

Recommendation 19: Help employers to understand their duty to manage the risks their staff face and create when using the road for work, and encourage the collection of work-related road accident figures and the evaluation of current work-related road safety interventions.

Recommendation 20: Develop a network of higher-performing organisations that can lead the way on

developing the evidence basis for "carry over" safety programmes from the workplace into other parts of life, particularly on falls prevention.

Research

Recommendation 21: Research the contributory factors leading to accidental harm to people of working age who misuse drugs (legal or illegal) and potential preventative interventions.

Older people (over-65s)

Home safety

Recommendation 22: Implement the recommendations of the National Falls Consensus Statement, ensuring that primary falls prevention is included in local plans and strategies alongside robust mechanisms for those who have already fallen.

Recommendation 23: Promote and support the development of local partnerships to enable the roll-out of home safety visits that seek to address multiple safety and health issues e.g. fire safety, falls prevention and other aspects of health and wellbeing.

Road safety

Recommendation 24: Promote self-assessment tools as a first step towards older drivers thinking about how they can drive safer for longer, with signposting to further sources of help and information about alternative methods of transport.

Research

Recommendation 25: Research the contributory factors leading to accidental harm to older people who misuse drugs (legal or illegal) and potential preventative interventions.

The success of this strategy in securing a step-change in the delivery of evidence-based accident prevention programmes across England will depend upon the commitment of a wide range of partners, as detailed in the recommendations. RoSPA and its partners will take forward a comprehensive engagement programme to secure such commitment.

This strategy serves as a call to action. It is hoped that all the organisations and professionals for whom there are recommended actions will consider their contribution to making life safer and healthier. A reduction in the costly burden of accidents on individuals, families, businesses and the health and social care system – indeed, on society as a whole – will be the ultimate measure of the success of this strategy.





2. Why do we need a national strategy?

Accidents are a leading preventable cause of death, serious injury and long-term disability. They devastate individuals, families, communities and businesses, and place a huge burden on our stretched health and social care services, and on society as a whole.

And yet the vast majority of accidents are preventable.

There have been significant reductions in accidental death and injury on the roads and in workplaces in recent decades, with nationally-led strategic approaches to prevention, featuring a blend of education, engineering and enforcement, being implemented for both road and occupational safety. Road and workplace accidents are also investigated systematically, enabling lessons to be learned for future prevention.

Home and leisure safety have not benefitted from such rigorous and enduring national strategic approaches to action or systematic review, and fatal home and leisure accidents have increased in both number and as a proportion of overall fatal accidents.

The burden of accidental injury

From 2013–2016, there was an average of 12,435 deaths from accidents each year in England, with a 15 per cent increase in the number of accidental deaths during this four-year period. The age-standardised mortality rate for accidental deaths also followed an upwards trend during this period, although it dropped slightly from 2015–2016¹.



Office for National Statistics. 2013–2016. Deaths registered in England and Wales. Number of deaths: ICD-10 codes: V01-X59, Y85, Y86. Mortality rate: ICD-10 codes: V01-X59.



An increase in falls (both slips, trips and stumbles on the same level and falls from height such as down stairs or steps) and poisoning from drugs (illicit and medicinal) that was classed as accidental are the key factors that have contributed to the overall rise in deaths from accidents².

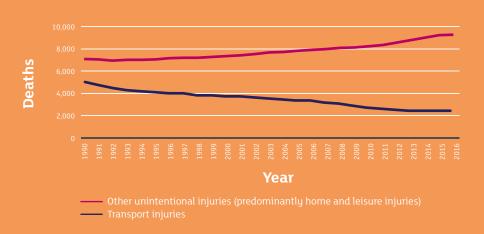
Figure 2: Top five causes of deaths from accidents (rates), all ages, England, 2013–2016

Office for National Statistics. 2013 – 2016. Deaths registered in England and Wales. Death rates: ICD-10 codes: V01-X59, Y85, Y86. Mortality rate: ICD-10 codes: V01-X59.



Figure 3: Deaths from unintentional injuries (numbers), all ages, United Kingdom, 1990–2016

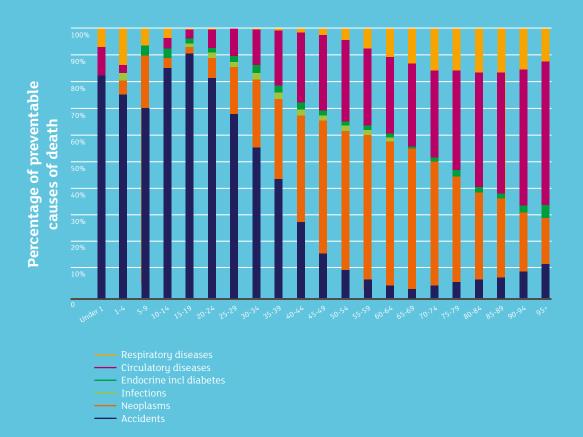
Institute for Health Metrics and Evaluation. Deaths due to unintentional injuries, United Kingdom, 1990–2016.



Accidents are the leading cause of preventable death up to the age of 39³ and are also the leading cause of preventable years of life lost (PrYLL) up to the age of 65⁴.

Figure 4:
Preventable
causes of death
as a % of total
preventable
causes of death
by age group,
England &
Wales, 2012

RoSPA analysis of Office for National Statistics mortality data, England and Wales, 2012. [A death is preventable if, in the light of current understanding of the determinants of health, all or most deaths from that cause (subject to age limits if appropriate) could be avoided by public health interventions in the broadest sense. Definition from the Office for National Statistics.]



From 2012/13–2016/17, there was an average of 729,704 hospital admissions each year as a result of accidents in England⁵. As with deaths, the figure rose throughout the period – by 11 per cent across the five years. About 40 per cent of accident-related hospital admissions involve people aged over 65 who have fallen. A rise in the number of falls is the most significant factor contributing to the overall increase in accident-related hospital admissions.

Figure 5: Number of hospital admissions resulting from accidents, all ages, England, 2012/13– 2016/17

NHS Digital. 2012/13–2016/17. Hospital Episode Statistics, Admitted Patient Care, England. ICD-10 codes

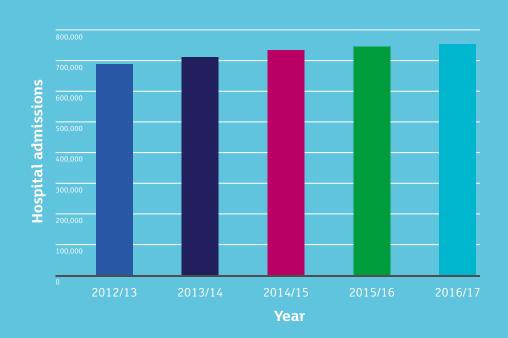


Figure 6: Top five causes of hospital admissions from accidents (numbers), all ages, England, 2012/13— 2016/17

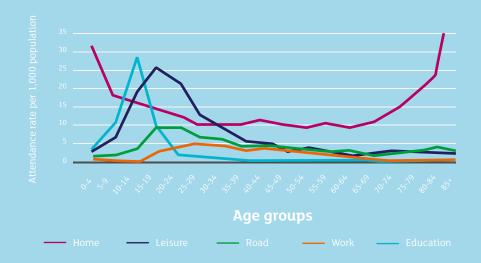
NHS Digital. 2012/13 -2016/17. Hospital Episode Statistics, Admitted Patient Care, England. ICD-10 codes: V01-X59, Y85, Y86.



An estimated 7 million emergency department (ED) attendances in England each year are due to accidents. Detailed national data on the types of accident that result in ED attendance have not been collected routinely since the Home Accident Surveillance System and Leisure Accident Surveillance System (HASS/LASS) ceased in 2002. Some injury causation data is now being collected via the Emergency Care Data Set (ECDS), launched during the autumn of 2017. In the absence of national data, a 2012 study from Oxfordshire provides the most recent insights into ED attendances that result from accidents. It found that home and leisure accidents accounted for 60 per cent of all accident-related ED visits⁶.

Figure 7: Emergency department attendances due to unintentional injuries (rates), Oxford University Hospitals NHS Trust (John Radcliffe and Horton General), January 1, 2012 – December 31, 2012

Oxford University Hospitals NHS Trust Emergency Departments, John Radcliffe and Horton General. 2012.



Based on the insights from the Oxfordshire data:



For most age groups, the home was where the greatest proportion of unintentional injuries occurred, most starkly for under-5s and older people.



For teenagers to those in their early-30s, leisure accidents were the leading cause of the unintentional injuries.



The road injury peak corresponded with young drivers.



The workplace injury peak corresponded with workers aged from their mid-20s to their mid-30s.

Another useful indicator of the burden of accidents is the disability-adjusted life year (DALY) – a measure of the number of healthy years of life lost due to ill-health, disability or early death⁷. Over the course of the most recent decade for which data are available, the rate of DALYs from unintentional injuries rose slightly in England, from 973.44 DALYs per 100,000 population in 2006 to 996.56 DALYs per 100,000 population in 2016. The rate of DALYs due to transport injuries fell during the same period, from 439.47 DALYs per 100,000 to 326.30 per 100,000. If unintentional injuries and transport injuries were merged to form a general "accidental injury" category, as in other data sources, together they would be ranked as the 7th largest cause of DALYs in 2006 and the 8th in 2016. Musculoskeletal disorders, which appear in another separate DALYs category, can also result from accidental injury sustained, for example, because of poor manual handling or during a fall.

Figure 8: Rate of DALYs per 100,000 populations, England, 2006 & 2016

Institute for Health Metrics and Evaluation Causes of disabilityadjusted life years (DALYs), England, 2006 & 2016.

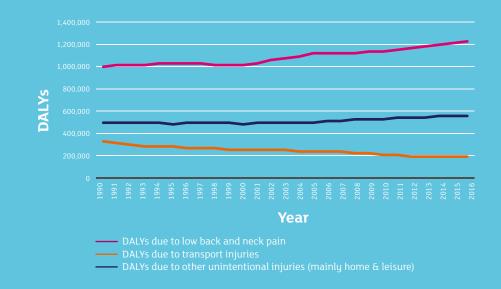
Communicable, maternal, neonatal & nutritional diseases Non-communicable

Injuries

	2006				2016	
1	Cardiovascular diseases	4,840.97		1	Neoplasms	4,616.89
2	Neoplasms	4,684.07		2	Cardiovascular diseases	4,023.09
3	Musculoskeletal disorders	3,046.77		3	Musculoskeletal disorders	3,107.40
4	Other non-communicable diseases	2,731.27		4	Other non-communicable diseases	2,762.73
5	Mental disorders	2,631.54		5	Mental disorders	2,649.71
6	Neurological disorders	2,166.82		6	Neurological disorders	2,235.22
7	Chronic respiratory diseases	1,402.09		7	Chronic respiratory diseases	1,352.21
8	Diabetes, urogenital, blood & endocrine diseases	1,149.85		8 Diabetes, urogenital, blood & endocrine diseases		1,113.07
9	Unintentional injuries	973.44	[- 	9	Unintentional injuries	996.56
11	Digestive diseases	551.32		11	Digestive diseases	536.58
12	Transport injuries	439.47		12	Cirrhosis & other chronic liver diseases	401.97
13	Self-harm & violence	425.34		13	Self-harm & violence	401.06
15	Cirrhosis & other chronic liver diseases	405.39		15	Transport injuries	326.30
				20	War & disaster	1.18
21	War & disaster	1.35				

Figure 9: Disabilityadjusted life years (DALYs), all ages, United Kingdom, 1990–2016

Institute for Health Metrics and Evaluation Causes of disabilityadjusted life years, United Kingdom, 1990–2016



The cost of accidents

While the data outlined above serve to focus attention on the leading causes of accidental death and injury, it must be remembered that the impact of accidents is not just measured in statistics. At the heart of each accident is a person, often more than one, whose life has been affected, at worst lost or irrevocably altered, in an incident that they had not foreseen. These individuals are not affected in isolation – family, friends, neighbours and colleagues also experience the trauma of the sudden, and often violent, event. Such trauma is rarely discussed in terms of its wider health and social impact; but the effects on those injured, and their loved ones, are not only physical, but also social, psychological and financial⁸.

For businesses, particularly when an accident has occurred at work, the financial implications can include lost time, legal costs and reputational damage, not to mention the emotional toll⁹. There are also consequences for employers when workers are injured in their own time or miss work to care for a relative or friend who has been injured in an accident, with more working days lost due to these instances than due to injuries suffered in the workplace itself¹⁰.

For the health and social care systems, and society as a whole, accidents bring significant costs. ED attendances and hospital admissions in England for under-5s who have been injured in accidents are alone estimated to cost £140million a year, while the annual "cost to society" of these accidents is put at £7.4billion¹¹. The annual cost of all hip fractures in the UK, including medical and social care, is about £2billion¹². In Britain, the annual cost of workplace fatalities, injuries and ill-health is estimated to be £14.1billion¹³, while the total value of prevention of road accidents in 2016 was estimated to be £36billion (based on medical and non-medical accidentrelated costs, including the lost output of the injured person, plus human costs associated with pain, grief and suffering)14. It is clear that the total cost to society of all accidents, if this cost was quantified by a single source, would run into many tens of billions of pounds.

An enabling approach

Despite the scale of the problem, "accidents" — as a single issue akin to "cancer" or "heart disease" — are often overlooked as being deserving of national attention. Partly, this is because they tend to be broken down into various sub-sets — road accidents, drowning, poisoning, falls and fires, for example — but it may also be fuelled by the commonly-held misconception that accidents *just happen* and cannot be stopped.

Relatively few accidents are wholly new or unforeseeable and the majority are preventable through the application of proportionate safety measures. The traditional "three Es" of safety – education, engineering/environment and enforcement – are important complementary approaches, promoting safe environments and safe behaviours. Additional "Es" have been proposed, including "enabling" or "empowering", which recognise the value of involving a target audience in the development of interventions¹⁵ and the benefits to life of accident prevention.

Indeed, far from being burdensome or limiting activity, a balanced and proportionate approach to safety can enable groups and organisations to develop their own risk competence and pursue their goals, confident that hazards have been identified and risks adequately assessed and controlled.

A risk-averse "cotton wool" approach to safety should be resisted because it could deny people, particularly children and young people, the opportunity to develop a fundamental awareness of risk and the knowledge and skills to manage it, and impede the promotion of active lifestyles and behaviours to improve health and wellbeing. It should be recognised that bumps and scrapes are part of life, helping to develop resilience and an understanding of risk, which can be drawn upon throughout the rest of life.

Serious accidents, however, can change lives forever, resulting in ongoing trauma, encompassing physical effects, plus associated social, psychological and financial impacts, not only on the individuals and families involved but also on the health and social care services and society as a whole. At a time of huge pressure on services, it is crucial to highlight the potential for accident prevention to make a difference in this respect.

This strategy is, quite deliberately, entitled "Safe and active at all ages". Accident prevention is not separate from other issues within England's public health system and there are obvious links with other priority areas. On road safety, for example, it is recognised that improving the safety of vulnerable groups like cyclists or child pedestrians can encourage greater participation in these activities, contributing to the health benefits of an active lifestyle and fewer vehicles on the road¹⁶ ¹⁷. Links between accidental injury and public health issues associated with risky behaviours, illustrated clearly by the relationship between alcohol consumption and drug use and various types of accident, including road accidents, poisoning and falls, should be explored and opportunities taken to address these issues in parallel. There are opportunities, for example, to share safety messages with people engaged in other aspects of health improvement, such as promoting electrical safety messages to those switching from traditional cigarettes to e-cigarettes¹⁸.

The strategy covers the whole of life and different types of accident. It is recognised that there are particular challenges relating to the safety of young children and older people in the home, young drivers and young people engaged in leisure activities, and that there are significant health inequalities, with the highest accident rates being among those living in our poorest communities. However, accidents affect people at all ages and stages of life, and from all walks of life. Various interventions can have a positive impact across all generations — homes and public spaces that are safer by design, for example — while others can be targeted to improve the safety of a particular age group, such as promoting physical activity among older people to help reduce their risk of falling.

For ease of reading, the strategy takes a life course approach, addressing the following age groups in turn:



Many accident prevention activities already take place across the country, with action promoted particularly by four indicators from the Public Health Outcomes Framework for England¹⁹:

Figure 10: Public Health Outcomes Framework indicators that relate directly to accidental injuries

Indicator	Description
1.10	Killed and seriously injured casualties on England's roads
2.07	Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25
	2.07i: hospital admissions caused by unintentional and deliberate injuries in children aged 0–4 years
	2.07ii: hospital admissions caused by unintentional and deliberate injuries in children aged 0–14 years
	2.07iii: hospital admissions caused by unintentional and deliberate injuries in young people aged 15–24 years
2.24	Injuries due to falls in people aged 65 and over
4.14	Hip fractures in people aged 65 and over

These indicators are taken from a set of 66 indicators which support the framework's vision to "improve and protect the nation's health and wellbeing and improve the health of the poorest fastest"²⁰.

A national focus

Despite accident prevention taking place across England, there is little consistency in both the quantity and quality of interventions, and some local areas are served better than others^{21 22}. Budget pressures are a contributory factor leading to variation in the quality and quantity of public health services provided at a local level²³.

While recognising that public health, and accident prevention within it, has been delivered at a local level in England since 2012, and that local decision-makers must be driven by local needs assessments, this strategy aims to inspire action across the country, ensuring that priority areas are identified and addressed with consistently high standards, and that sources of help are well signposted.

The aim of this strategy is:

To achieve a step-change in the delivery of evidence-based accident prevention programmes across England, promoting safe and active lives and reducing the burden of serious accidental injury on society.

The strategy's central objective is:

To secure local and national commitment by a range of stakeholders to implement evidence-based approaches to accident prevention that will reduce the costly burden of accidents on individuals, families, businesses and the health and social care system.

The majority of recommendations are aimed at those with responsibility for setting the accident prevention agenda locally, either in local authorities or the NHS, such as directors of public health, health and wellbeing boards, clinical commissioning groups and elected members with public health portfolios. However, there are also opportunities for those with frontline delivery roles to play an important part, including: health professionals in hospitals or the community, such as doctors, nurses, emergency service personnel, school nurses and health visitors; those working in education or early years roles such as in children's centres, schools and nurseries; planning and highways departments within local authorities; and businesses, which are well placed to have an impact on the communities in which they operate. On some issues, national action by government departments and other national organisations is needed.

Recommendations are prioritised that plug gaps in accident prevention, rather than calling for action that is already delivered in a systematic way across the country.

There is a considerable base of evidence on the effectiveness of accident prevention programmes, not only in terms of injury reduction but also in saving the associated costs to health care²⁴. As the project case studies highlight, many interventions are low cost, and investment can be recouped if relatively few injuries are prevented. In times of budgetary constraints, it makes sense to focus on those areas which can have the greatest positive impact and be tackled successfully at the least cost. Prevention is obviously better than cure; it is also much cheaper.



3. Strategic recommendations

The following broad themes have relevance across the life course, and provide recommendations that have the potential to impact multiple age groups.

Reducing inequalities

Accidents are rarely caused by a single contributory factor. In the home and on the roads, for example, accidents involving children are linked to a wide range of factors including, but not restricted to, child development, the physical environment of the home and road, the knowledge and behaviour of parents and other carers (including literacy), overcrowding or homelessness, the availability of safety equipment, levels of supervision, access to safe play spaces and the proximity of housing to busy roads²⁵.

Poverty influences many of these factors. Accidental injuries disproportionately affect children from low-income families, despite dramatic improvements in overall child health over the last 30 years²⁶. From 2012–2016, the rate of fatal and serious injuries to child pedestrians aged five to nine years old living in the 20 per cent most deprived areas of England was six times higher than to children in the 20 per cent least deprived areas; and among pedestrians aged 10 to 14 years old, this rate was 2.6 times higher in the 20 per cent most deprived areas compared to the 20 per cent least deprived areas²⁷. There were also inequalities among child cyclists – among those aged 10 to 14 years old, there were 4.2 fatal or serious injuries per 100,000 people in the 20 per cent least deprived areas, compared with 7.0 fatal or serious injuries per 100,000 people in the 20 per cent most deprived areas²⁸.

Children of parents who are long-term unemployed, or who have never worked, are 13 times more likely to die as a result of accidental injury and 37 times more likely to die from exposure to "smoke, fire or flames" than children of parents in higher managerial or professional occupations²⁹.

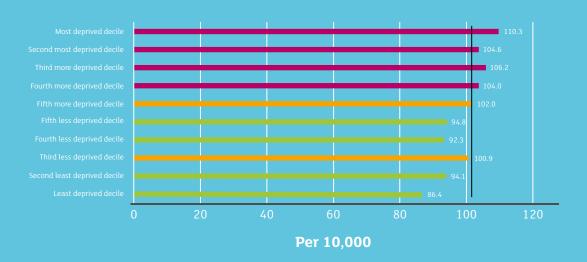
The Marmot Review into health inequalities, which was published in 2010³⁰, proposed an evidence-based strategy to address the social determinants of health – the conditions in which people are born, grow, live, work and age and which can lead to health inequalities – with action recommended across the life course. In addressing health inequalities, the review asserted that universal action was needed to reduce the steepness of the social gradient of health inequalities (rather than focusing on just the bottom 10 per cent), but with a scale and intensity that is proportionate to the level of disadvantage.

Aligning interventions with Marmot's recommendations would make an important contribution to reducing both accidents and health inequalities. A study of road accident data has shown that there would be around 810 fewer serious or fatal injuries to pedestrians annually, and 100 fewer serious or fatal injuries to cyclists, if all children and young people had a risk of injury as low as those in the least deprived areas³¹.

The focus of much recent research, as indicated above, has been on the links between children's accidents and deprivation; however, isolation and loneliness, which are aspects of "social deprivation", are also associated with mortality among older people³².

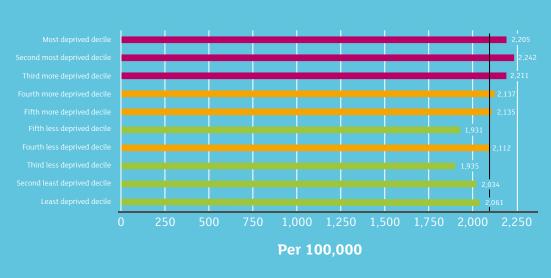
With addressing inequalities at the heart of the Public Health Outcomes Framework³³, a national strategy focusing on any area of public health must incorporate action on this issue. Various indicator data related to the framework illustrate the relationship between poverty and accidents affecting children and older people³⁴.

Figure 11: Hospital admissions caused by unintentional and deliberate iniuries in children (aged 0-14 years) - England, 2016/17 - Data partitioned by District & UA deprivation in England (IMD2015)



The England average

Figure 12: Emergency hospital admissions due to falls in people aged 65 and over – England, 2016/17 – Data partitioned by District & UA deprivation deciles in England



Figures 11 & 12: Data from Public Health England's Fingertips tool.

(IMD2015)

The England average

Advocating better data collection

While there are some useful sources of data about accidents, there remain omissions in intelligence which, if addressed, could aid the targeting and subsequent evaluation of accident prevention interventions.

In particular, there has been little in the way of national accident data coming from emergency departments (EDs) since 2002, when the Home Accident Surveillance System and Leisure Accident Surveillance System (HASS/LASS), operated by the former Department for Trade and Industry, ceased collecting data. A new Emergency Care Data Set (ECDS)³⁵ was introduced in EDs nationally from October 2017 and, within the next few years, it should provide a clearer picture of the causal factors that result in accidental injuries, which will be especially useful in developing the evidence base for home and leisure accidents. It is crucial that this system is able to be used consistently to record data about accidental injuries across the life course and that the data are then made accessible, nationally and locally, to facilitate the planning, delivery and evaluation of accident prevention interventions.

The strategic commitment of the Office for Product Safety and Standards to work with RoSPA and public health bodies to improve injury data collection is welcome³⁶.

Meaningful data-sharing processes among local agencies including the emergency services, hospitals and local authorities should be established, similar to the Cardiff Model in which data on cases of violence are shared³⁷. Coroners and child death overview panels are also well placed to alert other agencies about accidental deaths, which could particularly support the identification of emerging safety issues, such as those related to consumer products.

Even though there is great value in local data, an absence of local data or the small numbers involved in local data sets should not be reasons to avoid action on accident prevention, when regional or national data could help to inform decision-making.

Public Health England's Fingertips tool is a valuable addition to the data landscape, enabling analysis of a wide range of local, regional and national data relating to accidental injuries, and other public health indicators, and its use among professionals with an interest in accident prevention should be encouraged.

Safer environments

While a blend of different approaches to accident prevention can make a positive contribution across the life course, as per the traditional three "Es" of education, engineering/environment and enforcement, the strategic importance of safer environments cannot be overstated.

On child home safety, for example, evidence has shown that the most effective interventions are those that provide education alongside home safety checks and the provision and fitting of various items of safety equipment in the home³⁸.

There are other physical improvements to homes that could be incorporated at the design and build stage for the benefit of multiple generations, such as the provision of a lockable cupboard for the storage of medicines and household cleaning products, handrails for the stairs and window restrictors³⁹. For some issues, safety has been promoted through the introduction of specific building regulations, such as the requirement for thermostatic mixing valves to prevent devastating bath-water scalds⁴⁰. In the absence of legislation or regulations for every safety issue, homes that are safer by design could be promoted through partnership-working between architects, developers, safety organisations and local planning authorities, which could specify best practice requirements as part of the planning permission process.

Such joint working to bring about safer homes is aligned to the "healthy homes" agenda, which recognises housing as a key social determinant of health⁴¹, and which includes issues such as non-decent homes, the quality of private rentals, pollution, mould and fuel poverty.

The physical environment of roads and other public spaces also influences safety⁴² and wider health and wellbeing⁴³. For vulnerable road user groups, such as pedestrians and cyclists, and particularly for children and older people, the provision of safer road environments has been identified as one of the most effective interventions to prevent accidents⁴⁴.

There has already been a widespread roll-out of 20mph zones and limits to promote the safety of pedestrians and cyclists, who are most vulnerable in built-up areas, with evidence showing that 20mph zones (where lower speeds are designed to be "self-enforcing" and are encouraged by physical measures such as speed humps, chicanes, road narrowing and planting) show greater speed reductions than 20mph limits (where the legal speed limit is lowered without corresponding physical measures apart from 20mph speed limit repeater signs, and are thus cheaper to introduce)⁴⁵.

In addition to lower speeds, there are broader inventions that align road safety to wider health and wellbeing considerations – a theme running throughout this strategy. The Mayor of London's Transport Strategy⁴⁶, based on the Healthy Streets Approach⁴⁷, is a large-scale example of how these shared agendas can come together in practice. One of three key themes at the heart of the strategy is the creation of streets and street networks that encourage active transport – walking and cycling – including through a proposal to create safe and accessible walking routes to schools and other destinations such as shops, health services and parks.

Other areas should be encouraged to adopt similar approaches to planning – prioritising human health and experience – with opportunities for large-scale interventions at a municipal level as well as smaller interventions within individual developments.

In addition to changes to the road environment, studies have shown that advancements in vehicle technology, such as electronic stability control and speed limit compliance systems, can also make a significant contribution to improving safety on the roads⁴⁸.

Recommendations

Health inequalities

Recommendation 1

What action should be taken?

Where there are health inequalities due to links between poverty and injury rates, address these as a priority.

Who should take action?

Those responsible for local public health strategies, commissioning and oversight (e.g. directors of public health, clinical commissioning groups, health and wellbeing boards, local cabinet members for public health), government departments (national), relevant third and private sector organisations.

Data collection

Recommendation 2

What action should be taken?

Ensure that accident-related data collected via the Emergency Care Data Set are made easily accessible to local and national practitioners, enabling them to monitor injury trends, set priorities and evaluate interventions.

Who should take action?

Public Health England, NHS Digital.

Recommendation 3

What action should be taken?

Establish better accident-related data sharing among local agencies, to aid the identification of accident prevention priorities and the subsequent evaluation of interventions.

Who should take action?

Public health teams, hospitals, emergency services, child death overview panels, coroners.

Safer environments

Recommendation 4

What action should be taken?

Advocate for the provision of homes that are safer by design.

Who should take action?

Ministry of Housing, Communities and Local Government, Public Health England, directors of public health, local planning authorities, developers, relevant third and private sector organisations.

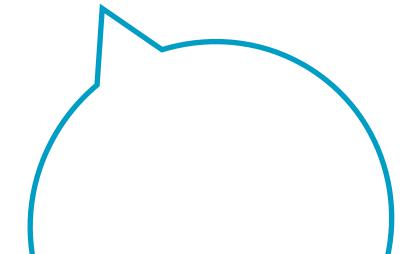
Recommendation 5

What action should be taken?

Make meeting the needs of vulnerable road users — pedestrians, cyclists, children and older people — a priority in local planning processes, with particular attention paid to lower speeds in built-up areas and with active travel promoted as a positive option.

Who should take action?

Department for Transport, Ministry of Housing, Communities and Local Government, Public Health England, directors of public health, local planning authorities, local highways authorities, developers, relevant third and private sector organisations.







4. Children (0-14s)

Accidents to children are a significant health issue, being a major cause of preventable death, serious injury and long-term disability.

Across England each year, an average of 132 children aged 0–14 die as a result of accidents⁴⁹ and more than 100,000 are admitted to hospital because of accidental injuries⁵⁰, of whom 50 per cent are under five. Indeed, under-5s are one of the age groups most vulnerable to accidents, especially in the home⁵¹, and they are over-represented in injury figures.

It is important that children have opportunities to experience and learn from age-appropriate exposure to risk, enabling them to develop important life skills, and it should be recognised that minor accidental bumps and scrapes are a part of childhood.

Physical activity is also important for children's overall health and wellbeing, and efforts to prevent accidents should be balanced with the broader benefits that a situation or activity offers – the benefits of risk. Recognising the importance of this balance guards against risk-averse interventions that seek to wrap children in cotton wool and which would ultimately be detrimental to their healthy development.

Serious accidents to children can be prevented successfully through a strategic approach that encompasses changes to the environment or products within it, sometimes supported by legislation, regulations or standards (enforcement), and education for parents, carers and, as they get older, children themselves⁵².

Figure 13: Five largest causes of accident-related deaths and hospital admissions (numbers) among children, England, 2012/13–2016/17

	Deaths 2013–2016		Hospital admissions 2012/13–2016/17		
0–14s	0–4s	5–14s	0–14s	0–4s	5–14s
1. Road accidents	1. Threats to breathing (suffocation, strangulation and choking)	1. Road accidents	1. Falls	1. Falls	1. Falls
2. Threats to breathing (suffocation, strangulation and choking)	2. Road accidents	2. Threats to breathing (suffocation, strangulation and choking)	2. Inanimate forces (striking/struck/ crushed by an object)		2. Inanimate forces (striking/struck/ crushed by an object)
3. Drowning	3. Drowning	3. Drowning	3. Road accidents	3. Poisoning	3. Road accidents
4. Falls	4. Inanimate forces (striking/struck/ crushed by an object)	4. Falls	4. Poisoning	4. Burns/scalds	4. Animate forces (striking/struck/ crushed by a person or injured by an animal)
5. Inanimate forces (striking/struck/ crushed by an object)	5. Fire	5. Poisoning	5. Animate forces (striking/struck/ crushed by a person or injured by an animal)	5. Animate forces (striking/struck/ crushed by a person or injured by an animal)	5. Poisoning

Figure 14: Children's (0–14) accidentrelated deaths (numbers), England, 2013–2016



Figure 15: Children's (0–14) accidentrelated hospital admissions (numbers), England, 2012/13– 2016/17



Figure 16: Top five causes of deaths from accidents (numbers), 0–4s, England, 2013–2016

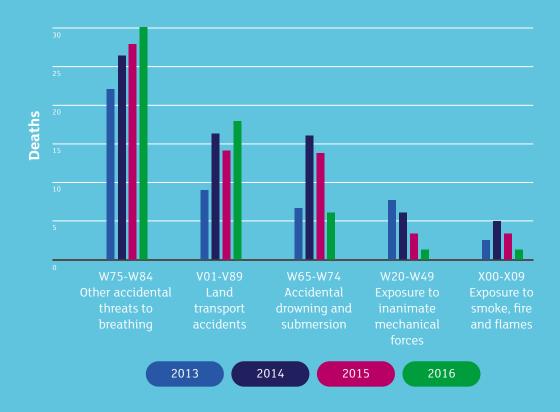


Figure 17: Top five causes of deaths from accidents (numbers), 5–14s, England, 2013–2016

2013

2014

2015

2016

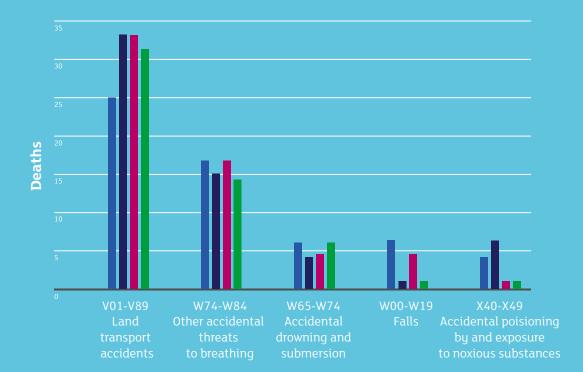


Figure 18: Top five causes of hospital admissions from accidents (numbers), 0–4s, England, 2012/13– 2016/17

2012/13

2013/14

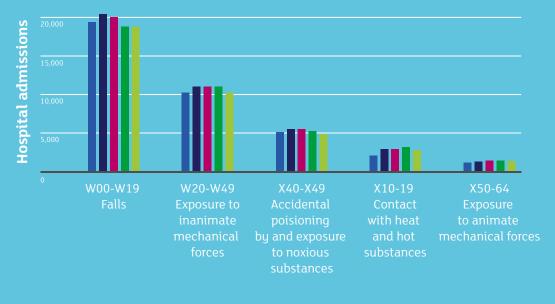
2014/15

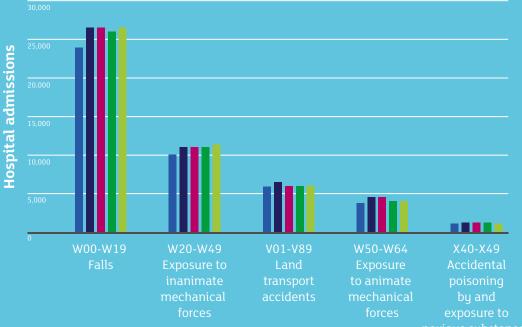
2015/16

2016/17

Figure 19:
Top five causes of hospital admissions from accidents (numbers), 5–14s, England, 2012/13–2016/17

Figures 14–19: Office for National Statistics. 2013–2016. Deaths registered in England and Wales; and NHS Digital. 2012/13– 2016/17. Hospital Episode Statistics, Admitted Patient Care England. ICD-10 codes





Priorities for action

An assessment of mortality and hospital admissions data supports the following priority issues for accident prevention among children:

- Home safety:
 - threats to breathing (suffocation, strangulation and choking)
 - falls (including babies being dropped and falls from a height e.g. down stairs or from windows)
 - poisoning
 - burns/scalds
- Road accidents:
 - pedestrian safety
 - in-car safety
- Drowning

It should be noted that inanimate forces do not appear on this priority list, not because cases are less important but because of the huge variation in the types of accident that make up this broad category, which makes a consistent approach to prevention difficult.

As the ED data presented on page 11 show, for the youngest children aged 0–4, accidents in the home are most prevalent, while for those aged 5–14, accidents that occur in education or leisure settings grow in prevalence.

Action on the priority issues for accident prevention among children can be grouped into various themes as set out below.

Strategic co-ordination

At a local level, strategic co-ordination on the prevention of children's accidents has the potential to influence the main accident priorities listed above, including, as recommended in the previous chapter, that inequalities in injury rates are addressed.

Despite guidance related to the prevention of child injuries being issued by the National Institute for Health and Care Excellence (NICE) and Public Health England (PHE), a 2017 study found substantial variation in prevention activities in local authorities in England (and health boards in Wales)⁵³. The research, which looked specifically at activities to prevent unintentional injuries to under-5s in the home, found that most areas did not implement the guidance, with only a third having a child injury prevention co-ordinator (IPC) or person undertaking this role alongside other responsibilities and 19 per cent having a child injury prevention strategy.

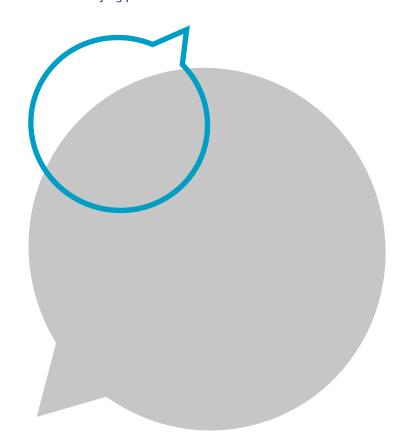
While child injury prevention appeared in joint strategic needs assessments in more than 70 per cent

of areas, the topic appeared less commonly in health and wellbeing board strategies and annual reports produced by directors of public health. Areas with an IPC were more likely to offer interventions such as child injury prevention training for practitioners, home safety assessments or a safety equipment scheme.

Directors of public health and directors of children's services, together with local clinical commissioning groups, members of health and wellbeing boards and sustainability and transformation partnerships are in an ideal position to provide strategic leadership for injury prevention through planning, coordination of services and commissioning, with effective allocation of resources. A senior manager should be designated as the lead for child injury prevention, and the development of a local strategy should be directed by an appropriate board such as the health and wellbeing board. There should be effective arrangements in place for co-ordinating injury prevention activities, such as via a multi-agency prevention group to lead local planning and implementation⁵⁴.

Both NICE⁵⁵ and PHE⁵⁶ recommend partnership-working on injury prevention at a local level, and areas with a multi-agency injury prevention group are more likely to provide training for practitioners and to have home safety equipment schemes than those without⁵⁷.

NICE recommends that the professional with specific responsibility for children's and young people's injury prevention should sit on the local safeguarding children board (now known as "safeguarding partnerships" in order to raise awareness of the need for injury prevention activities 59.



Building capacity to help parents and carers make homes safer

Health visitors play a pivotal role in delivering advice and support to families with young children through the Healthy Child Programme (HCP). The five universal reviews (antenatal health visit, new baby review, six-to eight-week assessment, one-year assessment and the two-to-two-and-a-half year review) provide structured opportunities for conversations about safety issues that are pertinent to the child's stage of development. It is vital that clearly-specified injury prevention interventions on such issues are developed for the HCP in order that they are delivered effectively.

Other practitioners, particularly those working in health, education or housing roles, for example at GP surgeries, children's centres, nurseries/pre-schools, childminders, playgroups, schools (including school nurses) and housing associations, can support parents and carers in making their homes safer, for example through referral to home safety assessments or equipment schemes, and road safety officers can also support families, such as through child car seat checking events.

Incorporating safety into professionals' support for families is consistent with the Making Every Contact Count (MECC) approach to reducing health inequalities⁶⁰.

On home safety specifically, evidence has shown that interventions provided through one-to-one, face-to-face education, particularly when complemented by home safety assessments and the provision and fitting of safety equipment, are effective in increasing a range of safety practices such as having a fitted safety gate and working smoke alarms and storing medicines and household products safely^{61, 62, 63, 64}. Practitioners need training in order to be able to deliver such education, assessments and equipment interventions effectively. However, less than half of the areas that responded to a 2017 survey of local authorities (England) and health boards (Wales) said that they provided child injury prevention training to their practitioners, or offered home safety assessments or safety equipment schemes⁶⁵.

A national study on the unintentional injury prevention activities of children's centres also found that although managers had positive attitudes towards potential injury prevention roles, they had gaps in knowledge about both injury prevention and local initiatives, and nearly all who responded to the survey said that training and assistance on injury prevention would help their centres⁶⁶.

As well as modules on accident prevention and how it links to other public health priorities during entry-level training programmes, particularly for health and early years practitioners, continuous professional development on this subject is vital in order that practitioners are able to keep up to date with best practice and emerging safety issues.

NICE recommends that the education and training provided to practitioners should support the wider health remit (such as the promotion of children and young people's development) and help practitioners to develop an understanding of the importance of preventing unintentional injuries, their consequences and the preventive measures available⁶⁷.

Working in partnership

Co-operation between industry partners such as manufacturers and retailers, local and national government (including trading standards) and safety organisations has worked well with regards to consumer product safety affecting children. Non-regulatory interventions, such as design innovations⁶⁸, clearer warnings on packaging⁶⁹ and public awareness campaigns⁷⁰, can result from such joint working, although regulation⁷¹ is still required on some issues. Positive examples include action on nappy sacks and blind cords, which have been linked to suffocation and strangulation respectively, in addition to liquid laundry detergent capsules, which have been related to eye as well as ingestion and aspiration chemical-related injuries.

In the absence of a comprehensive national injury surveillance system, which would collect in-depth information about accidents associated with particular products, information sharing between different parties is crucial in order to develop an understanding of what is happening and the options for addressing the issue.

Pedestrian training

The provision of safer road environments that encourage active travel like walking and cycling is fundamental for improved road safety, for all age groups of road user, and is covered on page 19.

Children at Key Stages 1 and 2 are also an important target for road safety education in order to prepare them for growing independence and the corresponding increase in road casualties, particularly around the transition to secondary school. In planning and prioritising such education, the links between road accidents and deprivation should be considered in order that inequalities are addressed. Small-group training conducted in real-road environments is to be encouraged, rather than sessions undertaken solely in a classroom or playground, because it has been shown to be more effective⁷², and it should cover modern-day scenarios, such as the potential for distraction by mobile devices. Pedestrian training could usefully be seen as the first step of a lifelong approach to road safety training that also encompasses cycle

training in primary schools (such as that already offered extensively by Bikeability), including the teaching of practical bicycle skills and road safety awareness and a discussion around the effectiveness of cycle helmets to reduce serious head injuries⁷³. Pre-driver education, the learning-to-drive process and further driver training continue the training cycle throughout life. Particular attention should be paid to the needs of children with special educational needs, who have been found to be especially vulnerable to injury in the road environment⁷⁴.

Transport for London STARS⁷⁵, Modeshift STARS⁷⁶ and Kerbcraft⁷⁷ are examples of schemes that support schools in teaching road safety and encouraging journeys by foot, bicycle or scooter, helping to reduce congestion, increasing physical activity and providing a safer and cleaner environment. Transport for London's Young Travel Ambassadors scheme, which is a peer-led behaviour change programme for secondary schools, also encourages walking and cycling, in addition to the responsible use of public transport; 76 per cent of participants since 2013 have agreed or strongly agreed that they have become more aware of their safety on the roads⁷⁸.

Road safety programmes that combine education and changes to the road environment in an integrated package show some potential but more rigorous research is required⁷⁹.

Personal, Social, Health and Economic (PSHE) education

Children and young people need opportunities to develop the capability to keep themselves and others safe, being able to recognise hazards, assess the risks and benefits of an activity and manage the risks to themselves and others, as appropriate for their age and stage of development. These are skills that will stand them in good stead to develop safe, healthy and fulfilling lives.

Broad, empowering themes that seek to build children's resilience, such as critical skills thinking, can begin to be covered through PSHE education at primary school and then be continued throughout secondary school. While some subjects at school already include teaching about the specific hazards and risks involved in a particular activity (for example, science, PE, art and design), a statutory, universal requirement, with appropriate funding, to engage children in developing more general hazard perception and risk management skills would reinforce the contribution made by such education to students' health, safety and wellbeing⁸⁰. It would also open up opportunities for teacher training programmes to cover this topic.

This strategy notes that relationships education is due to become compulsory in primary schools and relationships and sex education compulsory in secondary schools from September 2019, and that the Government is consulting (until November 2018) on proposals to make health education (including a topic called "health and prevention") compulsory in schools⁸¹.

A "learning about safety by experiencing risk" approach to safety education is to be encouraged, giving children the opportunity to develop their skills through practical activities. Visits to permanent practical safety education centres or participation in interactive safety schemes, can increase children's awareness of key risks. For example, research into the impact of children's visits to such schemes found that children who had experienced safety education improved their recognition of a variety of risk hazards⁸².

School swimming

Despite swimming and water safety being a statutory requirement at Key Stage 2, a 2014 survey found that 45 per cent of children aged 7–11 could not swim the required 25 metres (which is required by age 11) unaided⁸³.

The UK Drowning Prevention Strategy, published by the National Water Safety Forum in 2016, aims to achieve a 50 per cent reduction in accidental drowning fatalities by 2026⁸⁴. Specifically for children, the strategy has the following target:

 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.

Not only does this target address the safety of children during childhood, but, as with PSHE education, the learning and subsequent reinforcement of water safety skills through schools will contribute to a lifelong awareness of hazards and risk management. Opportunities for children to experience swimming and water safety in an "open water" environment such as a river, lake or the sea, as part of a structured programme, such as Swim Safe⁸⁵, should be encouraged.

Recommendations

Strategic co-ordination and capacity-building

Recommendation 6

What action should be taken?

Ensure that a senior manager is designated the lead for child injury prevention so programmes are delivered in an integrated and systematic way

and are supported by an injury prevention strategy and a multi-agency injury prevention group.

Who should take action?

Directors of public health, local authority children's services and safeguarding partnerships.

Recommendation 7

What action should be taken?

Support capacity-building through the provision of support and training for practitioners who work with children and families, enabling them to maximise the delivery of safety education for parents and carers, with families at higher risk of injury also being signposted to a home safety assessment and equipment.

Who should take action?

Local authority children's services and safeguarding partnerships, commissioners, managers and practitioners working in health, social care and education services, local injury prevention co-ordinators/managers, relevant third and private sector organisations.

Recommendation 8

What action should be taken?

Develop age-appropriate injury prevention topics for each Healthy Child Programme contact.

Who should take action?

Department of Health and Social Care.

Partnership-working on product safety

Recommendation 9

What action should be taken?

Work in partnership to identify and address emerging issues related to the safety of consumer products and children.

Who should take action?

Department for Business, Energy and Industrial Strategy/ Office for Product Safety and Standards, industry bodies representing manufacturers and retailers, trading standards, relevant third sector organisations.

Education and training for children

Recommendation 10

What action should be taken?

Ensure that children at Key Stages 1 and 2 have opportunities to undertake pedestrian training, with a particular focus on promoting safe and active travel.

Who should take action?

Local authorities, schools/academies, injury prevention co-ordinators, school travel advisers, emergency services, relevant third and private sector organisations.

Recommendation 11

What action should be taken?

Ensure that the prevention of accidental injuries is a core topic within the new compulsory health education curriculum for all schools.

Who should take action?

Department for Education

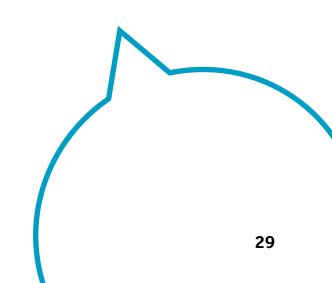
Recommendation 12

What action should be taken?

Support the delivery of the UK Drowning Prevention Strategy, with a particular focus on promoting learnto-swim and water safety education in schools.

Who should take action?

Local authorities, schools/academies, injury prevention co-ordinators, emergency services, relevant third and private sector organisations.



Case study: Maison

"I went into my seven-month-old baby son Maison's bedroom to wake him up — only it wasn't his beautiful smile I was greeted with. Instead Maison was lying in his cot with a handful of nappy sacks scattered around him and one was covering his face.

"From that moment it was all a painful blur, but I know that 999 was called and my house was full of paramedics desperately trying to save my baby's life. I knew he was gone and it was too late.

"Like many people, our changing stand had been placed next to the cot. Months earlier, I had placed some nappy sacks in the pockets of the stand, though I had forgotten they were there. Maison had never crawled. He could sit, but only if you placed him that way, but that day he must have learned to stand for the first time.

"Since Maison's death I have found out that nappy sacks have claimed the lives of at least 16 babies. I urge all parents, grandparents and carers to think about the possible dangers before they become a problem — be aware of the risks. Are there nappy sacks in reach? Are nappy sacks in a zipped changing bag? Whatever happens, don't have the attitude that 'it won't happen to me', because when tragedy strikes it leaves you heartbroken forever."

By Beth Amison, Maison's mum



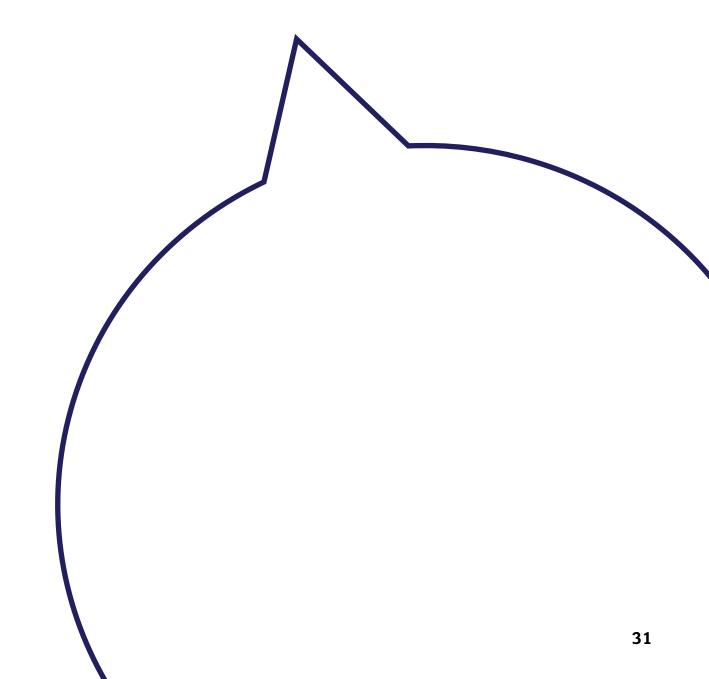
Case study: Take Action Today, Put Them Away

In response to figures which showed that accidental poisonings resulted in more than 5,500 hospital admissions among under-5s in England each year, RoSPA, with funding from the UK Cleaning Products Industry Association, launched an awareness-raising programme in 2013, which continues to date.

Take Action Today, Put Them Away, which is also supported by the Department for Business, Energy and Industrial Strategy, aims to equip families and professionals who work with them with the skills and knowledge to recognise potential dangers from household cleaning products.

During the programme's initial three years, it ran in seven areas (Birmingham, Liverpool, Bradford, King's Lynn, Nottingham, Newcastle-upon-Tyne and Winchester), involving at least 120 local partners. Magnetic notepads featuring safety advice were distributed to 240,000 families, with evaluation showing that a majority of families took action to store their household cleaning products safely, or shared safety messages with others, after encountering the programme.

Each local project cost £25,000 and early indications from Birmingham and Liverpool are that the number of children attending emergency departments due to accidental poisoning dropped by 50 per cent. The project has since been rolled out to other areas.





5. Young people (15–24s)

Young people have been identified as one of the groups most vulnerable to suffering accidental injury, particularly between the ages of 15-24 with road and leisure accidents especially prevalent.

Across England each year, an average of 571 young people aged 15–24 die as a result of accidents⁸⁶, and around 61,000 are admitted to hospital because of accidental injuries⁸⁷.

From our teenage years and into young adulthood is a time in our lives associated with an increase in risk-taking and thrill-seeking behaviour, linked to biologically-driven social and emotional factors, including an increase in the salience of peers in encouraging this behaviour⁸⁸. It is also a time of considerable practical change, including taking the first steps from studying into the world of work, with some young people moving away from home and engaging in fully independent travel and living for the first time.

Such is the significance of young people's risky behaviour, in terms of influencing their own behaviour into adulthood or putting other people at risk, that public health experts have suggested that reducing the rate of risk-taking by young people would make a substantial improvement to the overall wellbeing of the population⁸⁹.

Interventions that aim to prevent accidental injuries involving young people typically fall into one of two categories⁹⁰: firstly, those that seek to limit young people's exposure to risky situations (for example, laws that prohibit the sale of fireworks to under-18s); and secondly, those that give young people learning opportunities in order to develop their experience and understanding of safety issues and enable them to develop resilience (for example, programmes that introduce opportunities to learn about safety by experiencing risk).

Interventions such as graduated driver licensing (GDL) for new drivers involve a blend of the two approaches – restricting some behaviours, such as driving with passengers or during night-time hours, while also requiring that the learning-to-drive process includes driving in certain environments/conditions and/or a certain number of training hours.

Recognising the benefits of risk and challenge is an important consideration when examining the merits of potential interventions involving young people. Such a consideration should guard against interventions that are overly risk-averse and which could push young people towards other, potentially more risky, scenarios.

Figure 20: Five largest causes of accidentrelated deaths and hospital admissions (numbers) among young people aged 15–24, England, 2012/13–2016/17

Office for National Statistics. 2013–2016. Deaths registered in England and Wales, and NHS Digital. 2012/13–2016/17. Hospital Episode Statistics, Admitted Patient Care, England. ICD-10 codes:

Deaths 2013–2016	Hospital admissions 2012/13–2016/17
1. Road accidents	1. Falls
2. Poisoning	2. Inanimate forces (striking/struck/crushed by an object)
3. Drowning	
4. Threats to breathing (suffocation, strangulation and choking)	 Animate forces (striking/struck/crushed by a person or injured by an animal)
5. Falls	5. Poisoning

Figure 21: Young people's (15–24) accidentrelated deaths (numbers), England, 2013–2016

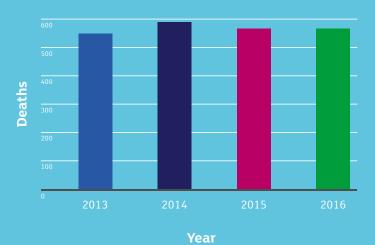


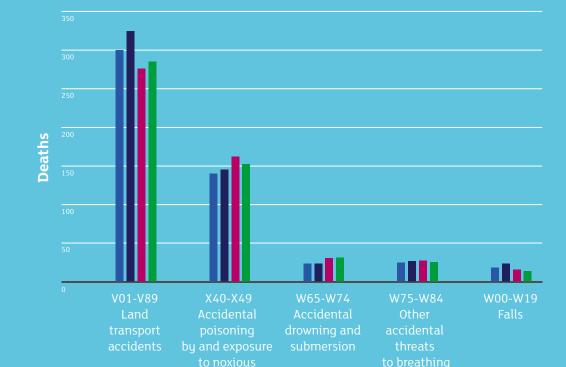
Figure 22: Young people's (15–24) accidentrelated hospital admissions (numbers), England, 2012/13– 2016/17



Figure 23: Top five causes of deaths from accidents (numbers), 15– 24s, England, 2013–2016

2013

2014



2015

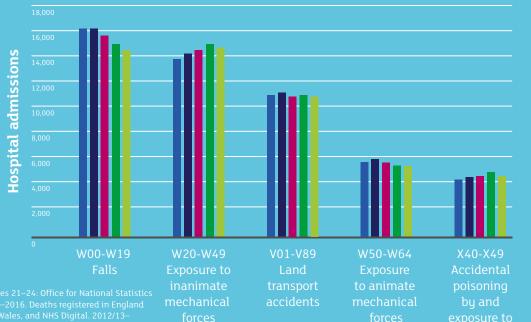
Figure 24: Top five causes of hospital admissions from accidents (numbers), 15-24s, England, 2013-2016



2013/14

2014/15

2015/16



Priorities for action

Young drivers

In 2015, drivers aged 17–24 made up just seven

Addressing young driver safety has the potential car drivers aged 17–24 and 162 other road users were

young people involved in cycle, moped/motorcycle and car accidents as drivers are more likely to be male, with traits of hyperactivity and sensation seeking, and who are more likely to be engaged in other risktaking behaviour and with drugs and alcohol⁹⁷. Given can also be seen to be a factor in accidents98.

training and testing provision is not sufficiently effective appear to motivate drivers to apply for the test as soon

post-test driving in specific situations; engaging a range of stakeholders, and utilising a logbook approach, in increasing the amount and breadth of pre-test on-road experience; and utilising in-vehicle data recording technology, and possibly parents, to manage driver behaviour post-test.

The DfT commissioned a controlled evaluation of each of these interventions, with the findings expected in 2020.

GDL has not yet been introduced in the UK, although some insurance companies offer telematics-based policies which use small devices known as "black boxes" to monitor when and how a vehicle is driven, and adjust the insurance premium accordingly. Multiple studies from countries in which GDL has been introduced show that there have been reductions in crash rates for all crash types, although the magnitude of the effects vary. Stricter schemes appear to result in greater reduction in fatality numbers 103. A conservative estimate is that the introduction of multiple components of GDL could result in saving at least 4,471 casualties and £224million per year in Great Britain, based on drivers aged 17–19 years-old only¹⁰⁴. Limitations on passenger numbers and on driving between midnight and 5am would be welcomed by more than 60 per cent of British adults aged 16-75105.

Poisoning

Accidental poisoning among young people is most commonly related to the misuse of drugs (legal or illegal), rather than the ill-effects of ingesting a noxious substance unintentionally (as is the case with young children).

On this topic, there is clearly a shared agenda between those engaged in efforts to reduce drug taking as a public health priority in itself and those engaged in the prevention of accidental injury. The Multi Agency Safety Testing approach piloted at two festivals in 2016, whereby festival-goers intending to take drugs were able to have samples of their substances tested for content and potency without fear of arrest or confiscation, is an example of where these two agendas could come together in a joint intervention 106.

Further research is needed into the area of young people who are misusing legal or illegal drugs, through drug abuse or dependence. Such research is vital in order to develop the evidence base related to the causes of harm and the potential interventions that could reduce such harm.

Falls

With falls being the fifth most common cause of accidental death among young people and the top cause of hospital admission, it is clear that they deserve attention as an accident prevention priority. However, to date there has been little research into young people's falls as a homologous accident type.

Falls on the same level, such as a slip, trip or stumble, account for 13 per cent of all falls-related hospital

admissions among young people, while falls from a height, such as down the stairs, also occur. In leisure pursuits, activities such as tombstoning (jumping from height into water) have been linked to peer pressure¹⁰⁷.

There is also emerging evidence regarding the influence of alcohol on young people's falls. An analysis of 3,942 falls that resulted in serious injury to 15–24 year-olds found that alcohol was the single biggest recorded factor, being referenced in 37 per cent of the cases (481 falls of less than two metres and 816 falls of more than two metres)¹⁰⁸. In the coming years, the Emergency Care Data Set could provide some useful insights into the activities being undertaken at the time a young person suffers a fall-related injury.

Drowning

Teenagers and young adults are most vulnerable to accidental drowning through risk-taking and thrill-seeking behaviour. As in other age groups, men are most at risk. Drowning deaths in the UK rise markedly from mid to late teens and throughout the 20s; of all 10-year age bands, the most distinct peak in the number of men drowning is in the 20–29 year-old group¹⁰⁹.

In almost half (44 per cent) of all fatal drownings in the UK from 2010–2013, the person had no intention of entering the water and was taking part in everyday activities such as walking. Contributing factors include alcohol, condition of the location/premises and lack of use of appropriate protective clothing or equipment¹¹⁰.

Examples of water safety schemes specifically targeting young people take place in various university cities across England. Also, the RNLI's Respect the Water campaign¹¹¹ is aimed at men aged 16–39, who account for the majority of coastal deaths each year. It aims to highlight drowning as an important and relevant issue, emphasising the extent of the problem by using strong messaging, thought-provoking statistics and real stories to encourage safer behaviour.

The UK Drowning Prevention Strategy, published by the National Water Safety Forum in 2016, aims to achieve a 50 per cent reduction in accidental drowning fatalities by 2026¹¹². Its recommendations that have particular relevance to young people are:

- Every community with water risks should have a community-level water safety risk assessment and water safety plan
- Increase awareness of everyday risks in, on and around water.

Personal, Social, Health and Economic (PSHE) education

With clear links between accidental injury and other risk-taking behaviours among young people, a resilience-building curriculum would be usefully delivered in all secondary schools to enable young people to further their understanding of the issues and empower them to develop coping strategies.

Programmes like Take Five – a whole-school resilience-building programme running in primary, secondary and special schools in the East Midlands – are sometimes designed to address one issue (in this case to reduce stress) but can evolve to incorporate wider public health and wellbeing topics, including injury prevention, with outcomes linked to feeling safer and more in control and cultivating self-inquiry and reflection to facilitate better choice-making¹¹³. Indeed, this particular programme received the endorsement of a public health commissioner particularly because of its focus on reducing health inequalities¹¹⁴.

This strategy notes that relationships education is due to become compulsory in primary schools and relationships and sex education compulsory in secondary schools from September 2019, and that the Government is consulting (until November 2018) on proposals to make health education (including a topic called "health and prevention") compulsory in schools¹¹⁵. A statutory provision of such health education, as highlighted previously on page 28, would ensure that the wellbeing of pupils is given appropriate status alongside their academic needs through universal access to resilience-building activities.

As discussed on page 28, a "learning about safety by experiencing risk" approach to safety education is to be encouraged, giving young people the opportunity to develop their skills through practical activities. The LOcHER (learning about occupational health by experiencing risk) project, which originated within the Health and Safety Executive, is one such example, whereby students, particularly at Further Education colleges, are able to undertake practical training in their given subject and engage practically with the related health and safety issues, with peer-to-peer learning being a core part of the project¹¹⁶.

Recommendations

Education and training for young people

Recommendation 13

What action should be taken?

Act on the findings of the controlled evaluation of approaches to young driver safety (expected in 2020), taking steps towards implementing a graduated driver licensing system if none of the other approaches are found to show the same promise.

Who should take action?

Department for Transport.

Recommendation 14

What action should be taken?

Ensure that the prevention of accidental injuries is a core topic within the new compulsory health education curriculum for all schools.

Who should take action?

Department for Education.

Recommendation 15

What action should be taken?

Support the delivery of the UK Drowning Prevention Strategy, with a particular focus on increasing young people's awareness of everyday risks in, on and around water and incorporating these risks in community-level water safety risk assessments and water safety plans.

Who should take action?

Local authorities, schools/academies, injury prevention co-ordinators, emergency services, relevant third and private sector organisations.

Research

Recommendation 16

What action should be taken?

Research the contributory factors leading to accidental harm to young people who misuse drugs (legal or illegal) and potential preventative interventions.

Who should take action?

Public Health England, Ministry of Justice, data collection/analysis/research institutions, relevant third sector organisations.

Recommendation 17

What action should be taken?

Research the contributory factors leading to accidental falls among young people and potential preventative interventions.

Who should take action?

Public Health England, data holders, relevant third and private sector organisations, academics/research institutions.

Case study: Ross

"Two days before Christmas, Ross, who was 22 at the time, went out to a bar in Washington with his work colleagues. Despite having cerebral palsy, he never let that affect his lifestyle of socialising and partying with friends. He spent that night drinking pints and shots.

"The plan was for him to go back to his mum's, but he never made it. Ross left the bar at about 10.30pm having told his friends that he was going to get a taxi into Sunderland. The following morning — Christmas Eve — his body was found in the River Wear.

"It seems that Ross decided to cross the road on to the river bank and went through a small gap in the fence. We believe he went over there to urinate. He slipped, fell into the river and drowned.

"I received a knock on the door from the police at 2pm on Christmas Eve to tell me my son had died. I was in disbelief; in utter shock. You feel as if you have been hit by a train. His mum and I arrived at the morgue an hour later to identify his body. It was devastating.

"I am now trying to raise awareness of the dangers of drink drowning and cold water shock. When you have alcohol in your system you get a lot more confidence and that's why people are more likely to go to water when they are drunk.

"I don't want Ross to have died in vain."

By David Irwin, Ross's dad

Case study: Youth Travel Ambassadors

Youth Travel Ambassadors (YTA) is a youth-led behaviour change programme for secondary schools, which targets groups of young people aged 11-19 to address transport issues affecting their school community. Run by Transport for London (TfL) in London and by Modeshift STARS elsewhere in the country, it takes a peer-to-peer approach in the form of campaigns and projects, with a focus on:

- Encouraging more walking and cycling to school as part of The Healthy Streets approach
- Improving road safety, contributing to Vision Zero
- Promoting responsible and safe travel on public transport to improve customer experience on the TfL network.

The scheme is promoted as a student enrichment programme that supports academic achievement, employability and skill enhancement.



Groups of up to 12 pupils are enrolled as YTAs at each participating school. YTAs survey their peers to understand the travel and transport issues directly affecting them and their community. They are responsible for developing and planning their school travel behaviour-change campaign, with the opportunity to pitch for funding if required, and then implement their campaigns, followed by evaluation and reporting on measurable behaviour-change outcomes.

Since 2013, more than a quarter of secondary schools in Greater London have engaged with the programme, with 4,600 students being trained as YTAs and delivering campaigns to more than 500,000 of their peers.

Campaigns focused on road safety and responsible travel are measured through pupil and teacher opinion surveys. Responses from pupils in London have showed an increase in road safety awareness, with 76 per cent agreeing or strongly agreeing that they have become more aware of their safety on the road. Also in London, YTA walking campaigns have, on average, increased walking by two per cent, and one school experienced a 158 per cent sustained increase in cycling following a week-long cycle event.





6. Adults (25-64s)

Our core adult years — which span the broad middle-aged period of our lives — are often associated with caring responsibilities for other people — particularly children and older parents — which has led to those in this age group being described as the "sandwich generation". This means that accidents affecting other members of the family can also impact significantly on those in middle age, for example through having to take time off work.

Of course, adults also have their own accidents. Across England, an average of 4,400 people aged 25–64 die as a result of an accident each year¹¹⁷, and there are 240,000 accident-related hospital admission episodes among this age group each year¹¹⁸.

Employment is a primary determinant of health, impacting directly and indirectly on the individual, their families and communities. Unemployment is associated with an increased risk of mortality and morbidity, and evidence also shows that a good working environment is good for health and a bad working environment (e.g. low levels of job control and organisational fairness) may contribute to poor health¹¹⁹.

Accidents that happen outside of work account for the greatest number of accidental injuries to adults of working age, with home accidents being the most common. However, it is notable that there is less variation in the rates of home, leisure, road and work accidents among the core adult age group than there are for other age groups.

Workplace accidents decreased significantly in the second half of the 20th century, and the downwards trend has continued into the 21st century, with 108 workers being killed at work in England in 2017/18¹²⁰. However, neither work-related road accidents nor cases of work-related ill health are included in these figures. The latter affects millions of workers across Great Britain¹²¹.

While it is important to continue pressing on with health and safety at work, which should not be considered a "job done", a huge opportunity to take forward accident prevention more generally relates to how lessons learned at work could be transferred outside of work in order to positively influence safety, health and wellbeing in other parts of life.

Figure 25: Five largest causes of accident-related deaths and hospital admissions (numbers) among adults aged 25–64, England, 2012/13–2016/17

Deaths registered in England and Wales, and NHS Digital. 2012/13–2016/17. Hospital Episode Statistics, Admitted Patient Care, England. ICD-10 codes: V01-X59, V85, V86.

Deaths 2013–2016	Hospital admissions 2012/13–2016/17
1. Poisoning	1. Falls
2. Road accidents	
3. Falls	3. Road accidents
4. Threats to breathing (suffocation, strangulation and choking)	 Animate forces (striking/struck/crushed by a person or injured by an animal)
5. Drowning	5. Poisoning

Figure 26: Adults' (25–64) accidentrelated deaths (numbers), England, 2013–2016

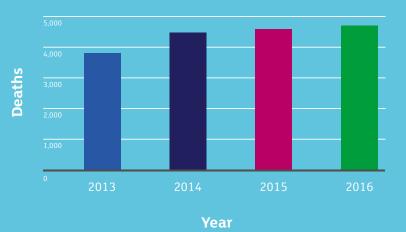


Figure 27:
Adults' (25–64)
accidentrelated hospital
admissions
(numbers),
England,
2012/13–
2016/17

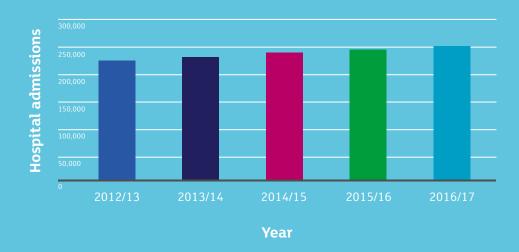


Figure 28: Top five causes of deaths from accidents (numbers), 25–64s, England, 2013–2016

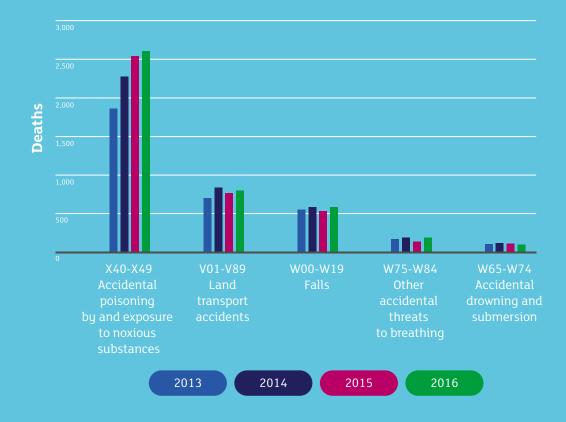


Figure 29: Top five causes of hospital admissions from accidents (numbers), 25–64s, England, 2013–2016

W00-W19
Falls
Exposure to inanimate mechanical forces
Forces

W01-V89
Forces
Forces

W50-W64
Exposure Accidental poisoning by and exposure to noxious substances

2012/13

Z013/14

Z013/14

Z014/15

Z015/16

Z016/17

Figures 26–29: Office for National Statistics 2013–2016. Deaths registered in England and Wales, and NHS Digital. 2012/13–2016/17. Hospital Episode Statistics, Admitted Patient Care, England. ICD-10 codes:

Figure 30: Key facts related to work-related ill health, Great Britain, 2016/17



Work-related ill health cases (new or long-standing) in 2016/17



Work-related stress, depression or anxiety cases (new or long-standing) in 2016/17



Work-related musculoskeletal disorder cases (new or long-standing) in 2016/17

Health and Safety Executive, Health and safety at work: summary statistics for Great Britain in 2017.

Estimates based on self-reports from the Labour Force Survey of people who had worked in the last 12 months.

Priorities for action

Poisoning

Accidental poisoning is not just the most common cause of accidental death among adults; it is also a growing problem. It is more commonly linked to drug poisoning (from either legal or illegal drugs) rather than the accidental ingestion or inhalation of other noxious substances, although cases of the latter do occur, including, for example, carbon monoxide poisoning.

To make real and lasting progress in the prevention of accidental poisoning, there are clear opportunities to explore a shared agenda between those engaged in the

prevention of unintentional injuries and professionals whose focus is on reducing drug abuse or dependence both from legal and illegal drugs. Further research would be useful in order to develop the evidence base related to the complex causes of accidental-poisoning harm in the adult population and the potential interventions that could reduce such harm.

Road safety

Despite welcome reductions in accidental death and injury on the roads in recent decades, road accidents remain a leading cause of death and serious injury among adults. Figures from the Health and Safety Executive (HSE) also show that being "struck by a moving vehicle" is the most common cause of accidental death in workplaces.

Important road safety interventions, such as improving the training and testing of learner drivers and an evaluation of post-test options, are already underway, and there continues to be educational programmes that seek to raise awareness of key risks on the road, such as drink or drug driving or the use of mobile phones at the wheel¹²². There are also ongoing campaigns for changes in the law to improve road safety, such as the lowering of the drink-drive limit and a switch to Single Double Summer Time to bring lighter evenings¹²³. The advancement of autonomous-vehicle technology, as illustrated through trials involving truck platooning¹²⁴ and driverless pods¹²⁵, holds arguably the greatest opportunity for transformation, not only in terms of how we use the roads but also how many of us are killed or injured on them.

While work-related road accidents are not included in occupational injury figures or given prominence in general road accident figures, it is estimated that about a third of road accidents involve someone who is at work at the time, meaning that action on work-related road risk could bring major benefits for society as a whole, and also employers specifically. This would be true while conventional vehicles dominate, as well as in a future in which autonomous vehicles come to the fore. To make a lasting impact on road casualty figures, employers need help to understand their legal duty to manage the risks their staff face and create when using the road for work, and to find ways to reduce at-work driving. The Driving for Better Business campaign¹²⁶, managed by Highways England, is raising awareness of the benefits that employers can achieve from managing work-related driving more effectively¹²⁷.

The Department for Transport has already pledged to encourage better occupational road safety, fleet management and procurement¹²⁸, including the evaluation of existing safer-driving-for-work schemes. Such evaluation is crucial in order to establish what works and how it can best be rolled out, which would encourage employers to follow a systematic approach to the management of work-related road risk ("Plan, Do, Check, Act"¹²⁹), rather than by implementing a series of surface-level tick-box interventions.

Robust data are essential in order to fully develop an understanding of the level of work-related road accidents, and thus to target them effectively, and it is hoped that improvements to how "purpose of journey" information is collected on police STATS19 forms will give increased visibility to the problem. Employers should also collect data on work-related road accidents involving their workforce in order to

establish the level of the problem they are facing and to help in the targeting of interventions.

Working in and through workplaces

Serious accidental injuries suffered at work, both fatal and non-fatal, have fallen dramatically during the past century, with there being just 108 fatal injuries to workers (employees and people who are self-employed) in England in 2016/17¹³⁰, excluding work-related road accidents. In contrast, there were more than 4,500 fatal injuries to employees in Great Britain at the turn of the 20th century¹³¹, and since 1974 – when the seminal piece of legislation, the Health and Safety at Work etc. Act, was introduced – the HSE estimates that the number of fatal injuries to employees has reduced by 85 per cent¹³². In terms of other health conditions linked to work, the HSE reports that there have been reductions in the rate of self-reported work-related illness, and specifically musculoskeletal disorders, while the rate of self-reported work-related stress and related conditions has remained broadly flat over the last 20 years. Mesothelioma deaths have continued to rise as a result of historical asbestos exposures¹³³.

Despite the many welcome advances in occupational health and safety, the cost of work-related injury and new cases of ill health in Great Britain in 2015/16, excluding long-latency illness such as cancer, was estimated to be £14.9billion 134 , making a strong case for continuing preventative action.

Various HSE strategies cover the most significant causes of injury and ill health in the workplace; however, much less has been written about the huge potential to use the workplace as a conduit for broader improvements to the safety, health and wellbeing of an individual worker, his or her family and the wider community.

On falls, which are the biggest cause of non-fatal injuries (specifically, slips, trips and stumbles on the same level) and the second biggest cause of fatal injuries (specifically, falls from a height) in the workplace, the "traditional" occupational safety and health curricula includes changes to physical environments and safe systems of work to reduce the toll of injuries¹³⁵. The drivers here are the achievement of legislative compliance and a reduction in the expense associated with injuries and lost time, with a view to creating a culture where every worker is given the opportunity to achieve their potential.

Given the prevalence of accidental falls at all stages of life, there is an opportunity to transfer learning from within the relatively-controlled workplace environment to the wider community through encouraging workers to be risk aware, not risk averse, within their out-of-work environments, managing falls-related risks to themselves and their loved ones.

A strategic multi-agency approach to falls prevention across the ages, with the workplace as a key delivery partner, thus merits consideration. Such "carry over" or "champion and cascade" programmes — which embed the workplace as a significant player in a life course approach to public health — have the potential to be regarded as one of those key shifts in safety culture seen only once or twice in a generation.

Indeed, some higher-performing organisations within occupational health and safety are already beginning to turn their attention to out-of-work safety initiatives. They recognise their corporate social responsibilities and also the fact that more worker absences are due to off-the-job, rather than on-the-job, accidents. In addition to targeted falls prevention programmes, some employers are introducing more general home safety initiatives, for example focusing on the safety of under-5s or older people in the home¹³⁶. As an emerging field of practice, there should be a focus on developing a solid base of evidence for such programmes, including related injury data, employee engagement feedback and the effectiveness of interventions. As our population ages and employers turn their attention towards enabling "sustainable working lives", the timeliness of developing programmes that link safety at work with safety beyond the workplace cannot be overstated.

Recommendations

Utilising the workplace

Recommendation 18

What action should be taken?

Encourage the collection of data on absence from work that results from accidents that happen away from work – either to workers or those for whom they have caring responsibilities.

Who should take action?

Relevant third sector and private sector organisations.

Recommendation 19

What action should be taken?

Help employers to understand their duty to manage the risks their staff face and create when using the road for work, and encourage the collection of workrelated road accident figures and the evaluation of current work-related road safety interventions.

Who should take action?

Department for Transport, Highways England, Health and Safety Executive, local authority road safety teams, relevant third and private sector organisations.

Recommendation 20

What action should be taken?

Develop a network of higher-performing organisations that can lead the way on developing the evidence basis for "carry over" safety programmes from the workplace into other parts of life, particularly on falls prevention.

Who should take action?

Relevant third and private sector organisations.

Research

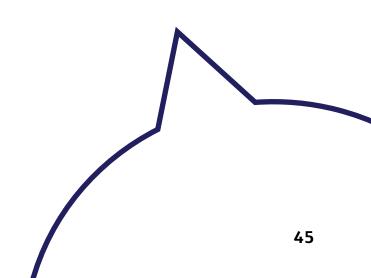
Recommendation 21

What action should be taken?

Research the contributory factors leading to accidental harm to people of working age who misuse drugs (legal or illegal) and potential preventative interventions.

Who should take action?

Public Health England, data holders, relevant third and private sector organisations, research institutions/academics.



Case study: Paul

"I was a builder; self-employed doing one-off house extensions. One day I was asked to have a look at some sheets on a barn roof that were leaking – they were only 12ft high and I felt comfortable about doing the lower levels.

"I can't remember how or what happened but I fell through an opening. I fell on a substantial cattle railing, cracked my head and was knocked unconscious immediately. I was on my own, I had no scaffolding and I had no duck boards.

"I was in a coma for four months. I was never actually told I was paralysed. I think I had to ask the question a couple of times. My wife was told that I was not going to make it; she was told I probably would not be the same man I was before due to brain damage. Fortunately I recovered from that but I can't walk.

"The first time the nurses took me to have a shower I was laid out on a rubber bed and then it hit me – my dignity had gone.

"I miss everything that I used to be able to do, all the physical stuff. Even being able to walk the dogs or watching my wife take the bins out — I miss it dreadfully.

"That two minute decision to do something I should not have done is something I have to pay for – for the rest of my life.

"Everything I know about health and safety I did wrong that day. I made a terrible mistake and I have to live with the consequences of that and so do my family."

By Paul Blanchard



In support of the European Agency for Safety and Health at Work's Healthy Workplaces campaign and in recognition of the prevalence of accidental falls at all stages of life, RoSPA partnered with the Active and Independent Living Improvement Programme (AILIP) in Scotland to create a blended approach to raising awareness of falls prevention at work and in the home.

The two organisations developed a workshop focused on increasing knowledge and awareness of falls and falls prevention, which could be delivered through a workplace but which also covered issues related to domestic falls.

Piloted with workers at a leading recycling firm in Glasgow in 2017, the effectiveness of the workshop was measured through pre and post questionnaires to gauge changes in knowledge and confidence. The following results were recorded:



- Understanding the issue of falls in the home increased by 25 per cent
- Understanding of falls prevention in the workplace increased by 21 per cent
- Understanding of falls prevention in the home increased by 30 per cent
- Confidence about preventing falls in the workplace increased by 17 per cent
- Confidence about preventing falls in the home increased by 20 per cent
- Confidence with helping a person be more aware of falls prevention in the home – increased by 33 per cent.

Qualitative feedback from workshop participants focused on the usefulness of the information shared about preventing falls among older people, and suggested improvements to the workshop including the provision of more specific examples and statistics related to falls in the workplace.

The workshop is being developed further, with the aim that it can be delivered by falls prevention "champions" in individual workplaces.







7. Older people (over-65s)

The good news is that we are living longer. The number of people in England aged 65 and over is projected to rise by nearly 20 per cent to 11.8million between 2016 and 2026¹³⁷.

However, an increase in life expectancy doesn't necessarily mean an increase in *healthy* life expectancy; for example, the number of people living with dementia in the UK is estimated to rise from more than 850,000 in 2015 (of whom more than 700,000 were in England) to more than one million by 2021¹³⁸. People are also living longer with complex health and care needs, posing a challenge to the NHS and society and warranting further research into the risks of multimorbidity¹³⁹, which could include an investigation of any correlation with increased injury risk.

Across England, an average of 7,300 people aged 65 and over die as a result of an accident each year¹⁴⁰, and there are 370,000 accident-related hospital admission episodes among this age group each year¹⁴¹. These figures are rising year on year.

People are increasingly seeking information about how they can age well to enjoy a productive and independent healthy older life. There is an opportunity to promote ageing as a good news story and to provide people with the tools to enjoy healthier, longer lives rather than to present the story of ageing as a drain on resources and a problem to be solved.

When looking at injuries, it is clear that programmes aimed at preventing accidents among over-65s in the home, particularly falls, have become critical to reducing harm, ED attendances and hospital admissions.

Figure 31: Five largest causes of accidentrelated deaths and hospital admissions (numbers) among older people aged 65+, England, 2012/13– 2016/17

Office for National Statistics. 2013–2016. Deaths registered in England and Wales, and NHS Digital. 2012/13–2016/17. Hospital Episode Statistics. Admitted Patient Care, England. ICD-10 codes: V01-X59, V85, V86.

Deaths 2013–2016	Hospital admissions 2012/13–2016/17
1. Falls	1. Falls
2. Road accidents	Inanimate forces (striking/struck/crushed by an object)
3. Threats to breathing (suffocation, strangulation and choking)	3. Road accidents
4. Poisoning	4. Threats to breathing (suffocation, strangulation and choking)
5. Fire	5. Poisoning

Figure 32: Older people's (65+) accidentrelated deaths (numbers), England, 2013–2016

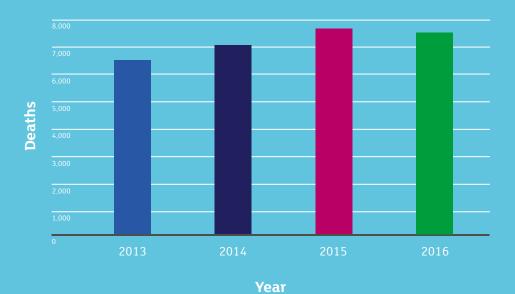


Figure 33: Older people's (65+) accidentrelated hospital admissions, England, 2012/13— 2016/17

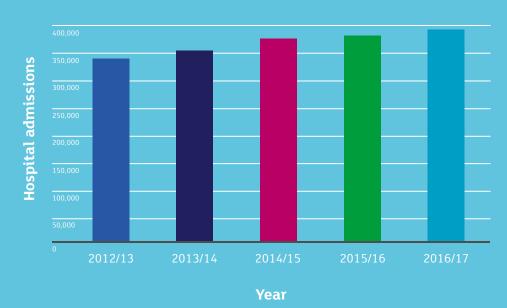


Figure 34: Top five causes of deaths from accidents (numbers), over-65s, England, 2013–2016

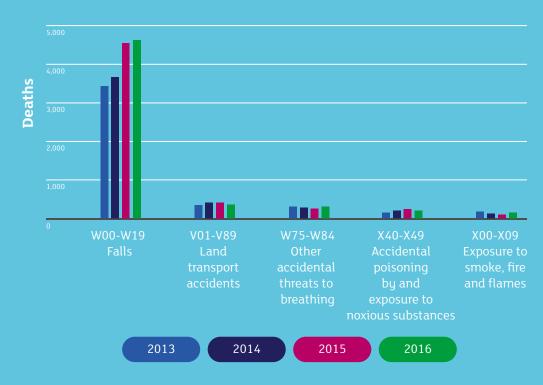


Figure 35: Top five causes of hospital admissions from accidents (numbers), over-65s, England, 2013–2016



2013/14

2014/15

2015/16

2016/17

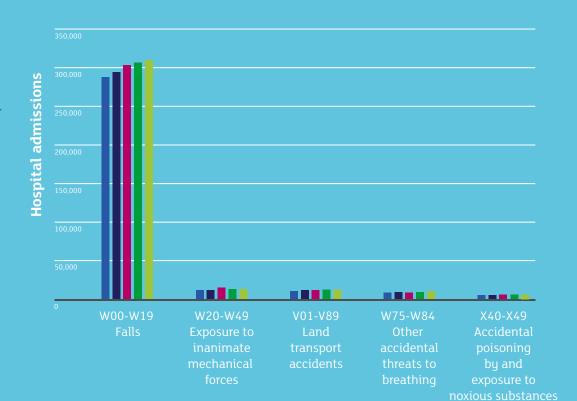
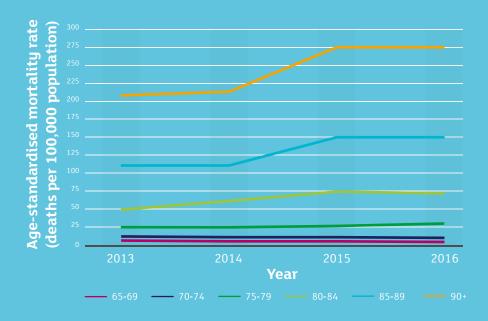


Figure 36: Deaths from accidental falls (rates) among over-65s, England, 2013–2016

Figures 32–36: Office for National Statistics. 2013 – 2016. Deaths registered in England and Wales, and NHS Digital. 2012/13 – 2016/17. Hospital Episode Statistics, Admitted Patient Care, England. ICD-10 codes: V01-X59, Y85, Y86.



Priorities for action

Falls

A strategic approach to falls prevention across the population has the potential to bring significant improvements, both for the health and wellbeing of older people and also for the health and social care sector.

Falls and fragility fractures (those sustained in falls from standing height or less) can result in loss of independence injury and death. In health service terms, they are high volume and costly, with 255,000 falls-related emergency hospital admissions in England per year among people aged over 65¹⁴²— nearly 700 every day. The cost of hip fractures to the UK is estimated at £2billion¹⁴³.

With the volume of falls and costs already at these levels, and with our population ageing, falls among older people cannot be left unchecked. Indeed, initially arresting the year-on-year rise in the number of older people falling, and then reducing it, is arguably England's greatest accident prevention challenge at present.

Most falls are the result of the interplay of multiple risk factors. These include: having a history of falls; muscle weakness; poor balance; visual impairment; polypharmacy (the concurrent use of multiple medicines) and the use of certain medicines; environmental hazards; and a number of specific medical conditions. Older people's

susceptibility to injuries such as fractures following a fall is due to the presence of additional risk factors such as osteoporosis, highlighting the importance of involving services and initiatives working in these related areas.

About a third of all people aged 65 and over fall each year, increasing to half of those aged 80 and over. Among older people living in the community, five per cent of those who fall in a given year will suffer from fractures and hospitalisation¹⁴⁴. One in two women and one in five men in the UK will experience a fracture after the age of 50¹⁴⁵.

More than 4,600 people in England over the age of 65 had a fall recorded as a cause of death in 2016¹⁴⁶. It is believed that this is the tip of the iceberg because falls can result in a decline in health, contributing to more deaths than this figure implies.

The road to recovery from a fall can be arduous, with many older people never regaining the independence or level of health and mobility that they had before they fell. A third of older people treated for hip fracture have not returned home 120 days after their treatment began and only 10 per cent describe themselves as being freely mobile and moving without aids¹⁴⁷. For some, it is the event which necessitates a move into long-term nursing or residential care. There is increased prevalence of fear of falling among older people and this can result in activity avoidance, loneliness and social isolation¹⁴⁸, which can also result in them experiencing other negative impacts on their health and wellbeing¹⁴⁹. A fall has been described as "the trigger point at which people start to lose capacity"¹⁵⁰.

Unaddressed fall hazards in the home are estimated to cost the NHS in England £435 million, and the House of Commons Communities and Local Government Committee has highlighted that hazards in the home contribute significantly to falls occurring. Evidence given to the committee suggested that 75 per cent of deaths related to falls happened in the home and that falls represented between 10 per cent and 25 per cent of ambulance call-outs to older people¹⁵¹. An evidence review on home adaptations found strong evidence that minor home adaptations are an effective and cost-effective intervention for preventing falls and injuries¹⁵².

The core principle on which falls prevention strategies must be based is that falls are not an inevitable part of ageing. With the commitment of a wide range of services, falls are preventable.

Many areas are already developing falls strategies underpinned by evidence-based interventions to help people stay on their feet, but this is by no means universal. Current falls prevention initiatives often focus on the response when a person first enters the healthcare system after a fall. This may be too late for those who never fully recover from their original fall and are more

vulnerable to falling again and to suffering other related consequences¹⁵³. There is also a need to tackle common risk factors at population level including muscle weakness, poor balance, visual impairment and polypharmacy.

In 2017, a National Falls Consensus Statement was produced by PHE¹⁵⁴, with members of the National Falls Prevention Co-ordination Group, highlighting the need for local commissioning and strategic leads with a remit for falls, bone health and healthy ageing to:

- Promote healthy ageing at all stages of life
- Ensure early identification of those at risk of falls
- Commission services that provide:
 - an appropriate response attending people who have fallen
 - multifactorial risk assessment and timely and evidence-based tailored interventions for those at high risk of falls
 - evidence-based strength and balance programmes and opportunities for those at low to moderate risk of falls
 - home hazard assessment and improvement programmes
- Develop local approaches to improve poor or inappropriate housing
- Ensure that local hospitals and care and nursing homes are focused on falls
- Provide services that reduce the risk of fallsrelated injuries such as fractures
- Provide evidence-based collaborative and integrated care for falls-related injuries supporting rehabilitation have a strategic lead and governance body with oversight and assurance of falls, bone health and related areas including frailty and multimorbidity
- Have a strategic lead and governance body with oversight for falls prevention and treatment.

Fire

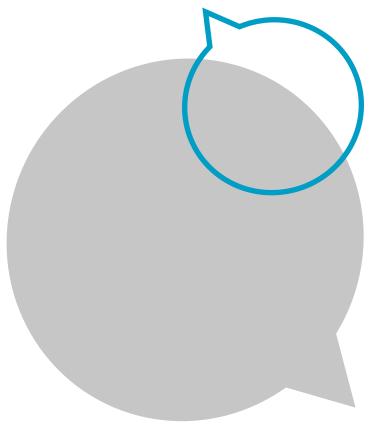
Although older people are less likely to experience a dwelling fire than other age groups, they are more at risk of dying in a fire¹⁵⁵. For every million people in England, there were 4.7 fire-related fatalities in 2016/17. The fatality rate was highest among older people; 9.7 fatalities per million for those aged 65 to 79 years old and 19.8 for those aged 80 years and over¹⁵⁶.

Four factors that increase the risk of dying in an accidental fire are smoking, alcohol, mobility and being over the age of 65¹⁵⁷. Using the evidence base related to these factors, some fire and rescue services have developed targeted interventions, such as Safe and Well home visits, which are available for those most vulnerable to fire, including over-65s¹⁵⁸.

Recognising the influence that fire and rescue services could have on different aspects of health and wellbeing, a pilot project took place during the winter of 2015/16 involving PHE and three fire and rescue services (Staffordshire, Greater Manchester and Gloucestershire). The pilot involved fire service personnel conducting Safe and Well visits to vulnerable households, including over-65s, not only to address fire safety but also other health and wellbeing issues – cold homes, social isolation, falls prevention and signposting to flu inoculations – with occupants being referred to other services, including Age UK, for further support where appropriate¹⁵⁹.

The evaluation found that crews were identifying people who needed specialist support, with 22 per cent being referred to a falls service, 6 per cent referred because of cold homes and 7 per cent referred because of social isolation. There was initial concern that this would overload services or identify people who were already receiving interventions; however, partner organisations highlighted that the referrals they received were appropriate and were for people not previously known to them. The pilot evaluation estimated the added cost of the intervention at £13 per visit, whereas a mid-to high-risk fall averages £4,530 in direct costs to the public sector 160 .

Developing the links between different agencies further, Greater Manchester Fire and Rescue Service's Community Risk Intervention Teams (CRIT) launched holistic home safety checks to identify and mitigate risks in the home, fitting a wide range of risk reduction equipment to improve quality of life and reduce demand for services, and also responding to cardiac arrests, other categories of life threatening calls and falls in the home on behalf of



the ambulance service and concern-for-welfare calls on behalf of the police. Evaluation has shown that the NHS is likely to benefit financially from CRIT on an annual basis by £635,320 comprised of: benefits incurred as the result of fast response-times by CRIT which have either saved lives or prevented neurological damage; and benefits incurred by prevention-type activity which have reduced the likelihood of falls which could incur ED attendances, hospital admissions and social care 161 .

Poisoning

Accidental poisoning among older people is more commonly linked to drug poisoning (from either legal or illegal drugs) rather than the accidental ingestion or inhalation of other noxious substances, although cases of the latter do occur.

Further research is needed into the area of older people who are misusing legal or illegal drugs through drug abuse or dependence. As with other age groups, such research is vital in order to develop the evidence base related to the causes of harm and the potential interventions that could reduce such harm.

Exposure to carbon monoxide (CO) poisoning is also contained within the broad category of accidental poisoning. Older people, particularly those with underlying health conditions such as respiratory problems, are more susceptible to the ill effects of CO poisoning than the population as a whole and account for the majority of deaths – about 40 per year across the UK. The effects of CO may also go unnoticed because symptoms – such as a headache, nausea, vomiting or dizziness – are commonly connected to other health conditions. Surveys have shown that boilers and appliances of older people are far less likely than others to have been serviced recently, placing them at greater risk of CO poisoning.

Older drivers

For many older people, driving promotes independence and connection with others, giving them the freedom to go where they want to go, at a time of their choosing¹⁶².

The number of older drivers has risen in recent decades. According to National Travel Survey data, the percentage of people aged 70 and over holding a full car driving licence increased from 39 per cent in 1995/97 to 62 per cent in 2014¹⁶³.

Age alone is not a reliable indicator of driving ability. Car drivers aged 70 and above were involved in 11,518 reported road accidents in Great Britain in 2016, compared with 27,717 involving drivers aged 17 to 24¹⁶⁴. In fact, accident involvement is at its lowest rate for drivers aged 60–79¹⁶⁵. However, older drivers, and older passengers, are more likely to die or sustain a severe injury than a younger adult

in an accident of the same impact¹⁶⁶, and the fatality rate among drivers aged 70 or over is the highest for all age groups¹⁶⁷. In 2016, 23 per cent of car-occupant deaths in Great Britain were among people aged 70 years or over¹⁶⁸. For every mile driven, the risk of a person aged 80 or over being killed while driving is 10 times higher than the lowest risk 40–49 year old¹⁶⁹. The over-representation of older drivers in road deaths is mostly due to their increased frailty, leaving them more susceptible to serious injuries.

Police records show that the risk of a driver aged over 70 killing a pedestrian is less than that of middle-aged drivers and half that of drivers aged up to 25, although "catastrophic claims" data from an insurance company found that some older drivers, possibly those in the over-80 age group, may be disproportionately involved in crashes leading to very serious third party injuries¹⁷⁰.

As we get older, we may experience changes in our physical condition, such as deteriorating eyesight, slower reaction times, a declining ability to judge approaching-vehicle speeds¹⁷¹ or dementia, which could impact on our driving, but the timing of such changes are different for each person and there isn't a set age at which we automatically become unsafe to drive. A dementia diagnosis, for example, does not mean that someone should give up driving immediately – what matters is whether they are able to drive safely¹⁷². Self-regulation is common, and older drivers may consciously make fewer journeys and avoid more demanding situations such as driving on motorways, at night, during busy times or in unfamiliar locations.

The benefits of driving to many older people must be acknowledged, with the aim being to help people to drive safely for longer. Changes to the road environment (such as offset turn lanes, internally lit street signs, and advanced street name signs), in-vehicle technologies (such as navigation systems, park assistance and vehicle stability control) and driver training (including hazard perception) are potential interventions. Because driving is a complex task that requires the successful integration of a number of processes, it is unlikely that any individual tool will result in increased safety¹⁷³.

Research into driver training has been varied and it has been difficult to identify the specific parts of training interventions that are most successful. Training and new technologies may suffer low uptake, whether because of time requirements, lack of self-awareness or the expense of taking part in training or fitting a car with new technology. In this case, education and self-evaluation (through self-assessment tools such as questionnaires or profiling tools) are likely to become useful in helping older drivers develop a healthier awareness of changes to their own driving abilities. They can help empower

drivers and their families to make decisions about driving limitations and, ultimately, driving cessation¹⁷⁴.

Good information and advice about alternative means of travel and lifestyle adaptations should be provided for those older drivers who reach a point where giving up driving may be the right thing to do. Alternative means of transport should be supported and promoted wherever possible, in order to enable older people who do not drive to maintain their independence, which is a factor linked to wellbeing¹⁷⁵.

Pedestrians

In 2016, 32 per cent of pedestrian deaths in Great Britain were among people aged 70 years or over¹⁷⁶.

Much less has been written on older pedestrian safety than on older driver safety, although a critical review of literature found that: the risk of an accident crossing the road increased more rapidly with age from the early 60s, very rapidly from 70 years and substantially after about 79 years; accidents were closely related to the times and places that older people most often walked, being more common during the day and 73 per cent being within 1km of home; and, as with car occupants, the injuries caused to older pedestrians in collisions were more severe than for younger people 177.

Older people do not necessarily feel any more vulnerable than other pedestrians, and their concerns about safety as a pedestrian tend to focus more on the experience of walking on the pavement, and related obstacles, than on crossing the road. While their attitude to crossing the road is probably more cautious than others, bad habits, such as "chancing it" by not using a crossing, have changed little since they were younger¹⁷⁸.

Interventions to improve the safety of older pedestrians can address older people themselves, other road users such as drivers or the road environment. There has been little evidence that information campaigns directed at older pedestrians reduce accident risk, although they may serve ancillary purposes, whereas educating drivers to understand their responsibility to vulnerable road users, including older pedestrians, has, where evaluations have been published, been found to be effective, although it should be noted that there have been few evaluations of this nature. The best evidence stems from studies of physical and regulatory changes, where measures such as lower speed limits, roundabouts and appropriate signal timing for vehicles and pedestrians have been shown to reduce pedestrian accidents¹⁷⁹.

The key measure to address the risk for older pedestrians – indeed for pedestrians of all ages – is to engineer

a safer environment that has lower vehicle speeds, is designed for their needs and encourages walking, given the importance of physical activity for health and wellbeing, and associated environmental benefits.

Recommendations

Home safety

Recommendation 22

What action should be taken?

Implement the recommendations of the National Falls Consensus Statement, ensuring that primary falls prevention is included in local plans and strategies alongside robust mechanisms for those who have already fallen.

Who should take action?

Department for Health and Social Care, Public Health England, NHS England, those responsible for local public health strategies, commissioning and oversight (e.g. directors of public health, clinical commissioning groups, health and wellbeing boards, local cabinet members for public health), relevant third sector organisations.

Recommendation 23

What action should be taken?

Promote and support the development of local partnerships to enable the roll-out of home safety visits that seek to address multiple safety and health issues e.g. fire safety, falls prevention and other aspects of health and wellbeing.

Who should take action?

Public Health England, NHS England, local authorities, emergency services, relevant third sector organisations.

Road safety

Recommendation 24

What action should be taken?

Promote self-assessment tools as a first step towards older drivers thinking about how they can drive safer for longer, with signposting to further sources of help and information about alternative methods of transport.

Who should take action?

Department for Transport, relevant third and private sector organisations.

Research

Recommendation 25

What action should be taken?

Research the contributory factors leading to accidental harm to older people who misuse drugs (legal or illegal) and potential preventative interventions.

Who should take action?

Public Health England, data holders, relevant third and private sector organisations, research institutions/academics.

Case study: Gloria

"I live in Northamptonshire and have always had a positive outlook on life with the aim of staying healthy as long as possible and I would like to use my experience to help others do the same.

"I am now retired but still have a very active life. I have used walking aids for the past 20 years. Despite this, I use my wheels and join the tea dances set up by the forum I chair. I firmly believe that 'if you don't use it, you lose it'.

"I have had first-hand experience of falls. I know the pain and effect it has on your confidence when you fall. Falls can be very restricting if you are independent, which is very frustrating for someone like me.

"My next-door neighbour fell in his garden on a very cold day. Despite his calls for help, he lay for two hours before anyone heard him. Besides his injuries, his confidence has been rocked by his very traumatic experience.

"Spread the word if you find something useful about falls prevention. Together, we can all stay as active and independent as possible. I know from experience that 'old bones don't bounce'. I want to keep my independence and quality of life as long as possible. Always remember the old saying 'prevention is better than cure'."

By Gloria, whose story features in the "Standing Up for Ourselves in Northamptonshire to Prevent Falls" video, which was produced in a joint project involving Northamptonshire County Council, NHS Nene Clinical Commissioning Group and RoSPA¹⁸⁰.



Case study: Preventing falls — implementing FaME in the real world

Based on the ProAct 65+ trial which showed FaME (falls exercise management) classes were effective at promoting physical activity and preventing falls in people aged 65 and over, Leicestershire, Rutland and Derby local authorities commissioned 29 24-week FaME classes from 2016 to 2017.

The classes were provided by postural stability instructors and delivered in community venues.

The findings of an evaluation by the University of Nottingham have been promising.

A total of 356 older people took part in 29 classes – 79 per cent aged 70 or over and 39 per cent aged 80 or over. Participants had a wide range of health problems, 51 per cent took more than four medications, 32 per cent had fallen in the last year, 30 per cent were at high risk of future falls and 48 per cent were very concerned about falling.

Overall, 41 per cent of participants completed at least 18 weeks of the programme. These people increased their physical activity by 170 minutes per week, were more confident in their balance and became less concerned about falling. The number of falls reduced from 1.27 to 1.04 per participant per year, though the numbers were too small to show statistical significance. The results emphasised the need to ensure that participants completed as much of the programme as possible.

Older people recognised that they benefited from the classes through increased physical fitness, reduced social isolation and less fear of falling, and commissioners saw the value of the classes and were keen to re-commission them.

The University of Nottingham project team is producing an implementation toolkit – to be launched in autumn 2018 – to guide commissioners through the commissioning process from start to finish.

8. Making it happen

The success of this strategy will depend upon the commitment of a wide range of partners, as illustrated by the organisations and professionals for whom there are recommended actions.

This is representative of the fact that accidents touch every age and every part of life.

In order to secure this commitment, in line with the strategy's central objective, the recommendations that are made are based on evidence of where the greatest accident prevention problems are and a discussion on the effectiveness of various interventions.

The aim is to achieve a step-change in the delivery of evidence-based accident prevention practice across England, with greater consistency in provision from area to area.

The links between accident prevention and other aspects of the public health agenda – particularly the importance of healthy activity and the associations between various types of risk-taking behaviour – are highlighted throughout the strategy. In so doing, it is hoped that those with responsibility for commissioning, planning or delivering public health will consider the opportunities for including an accident prevention element in other interventions, and vice versa.

Accidents are the leading cause of preventable death up to the age of 39, and there are particular health and social care challenges resulting from older people's falls. As this strategy has highlighted through personal stories, the impact of accidents on individuals and families is devastating.

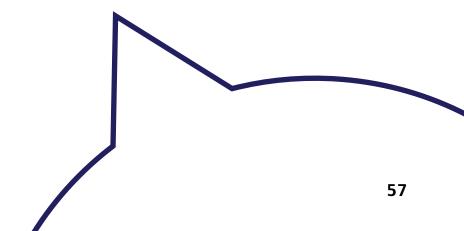
This strategy serves as a call to action. It is hoped that all the organisations and professionals for whom there are recommended actions will consider their contribution to making life safer and healthier.

Specifically, RoSPA and its partners will take forward a work programme to seek commitment and action on the recommendations contained within this strategy. Key performance indicators will be developed for each area in order to enable progress to be tracked and further activities to be planned.

Securing a step-change in the delivery of evidence-based accident prevention programmes across England would be a significant achievement, and one that could potentially be followed by the setting of measurable targets for injury reduction.

Indeed, a reduction in the costly burden of accidents on individuals, families, businesses and the health and social care systems – and on society as a whole – will be the ultimate measure of the success of this strategy.

If you want to know more about getting involved or want to register your commitment to contributing to the strategy's delivery, please email campaigns@rospa.com or visit www.rospa.com/nationalstrategy which will be updated with progress reports, examples of good practice, partner details and event information.



References

- ¹ Office for National Statistics. 2013–2016. Deaths registered in England and Wales (series DR). Available at: https://www.nomisweb.co.uk (accessed March 2018).
- ² See reference 1.
- RoSPA analysis of Office for National Statistics mortality data, England and Wales. 2012.
- ⁴ RoSPA calculation based on: Office for National Statistics. 2010. Deaths registered in England and Wales (series DR).
- NHS Digital. 2012/13–2016/17. Hospital Episode Statistics, Admitted Patient Care, England. Available at: https://digital.nhs.uk/data-services/hospital-episode-statistics (accessed March 2018).
- ⁶ Oxford University Hospitals NHS Trust Emergency Departments, John Radcliffe and Horton General. 2012. Analysis of A&E attendances due to unintentional injuries.
- ⁷ Institute for Health Metrics and Evaluation. 2018. Global Burden of Disease (GBD) Compare. Available at https://vizhub.healthdata.org/gbd-compare/ (accessed April 2018).
- ⁸ Health and Safety Executive. 2006. Identifying and evaluating the social and psychological impact of workplace accidents and ill-health incidents on employees. Available at: http://www.hse.gov.uk/research/rrpdf/rr464.pdf (accessed March 2018).
- ⁹ See reference 8.
- Royal Society for the Prevention of Accidents. 2006. Promoting safety 24/7. Available at: https://www.rospa.com/rospaweb/docs/advice-services/occupational-safety/247safety-workshop.pdf (accessed March 2018).
- Royal Society for the Prevention of Accidents/Royal College of Emergency Medicine. 2015. Action on accidents. Available at: https://www.rospa.com/RoSPAWeb/docs/advice-services/public-health/action-on-accidents.pdf (accessed March 2018).
- National Institute for Health and Care Excellence. 2016. Hip fracture in adults: NICE quality standard. Available at: https://www.nice.org.uk/quidance/QS16/documents/draft-quality-standard-2 (accessed March 2018).
- Health and Safety Executive. No date cited. Costs to Great Britain of workplace injuries and new cases of work-related ill health 2015/16. Available at: http://www.hse.gov.uk/statistics/cost.htm (accessed March 2018).
- Department for Transport. 2017. Accident and casualty costs (RAS60). Available at: https://www.gov.uk/government/statistical-data-sets/ras60-average-value-of-preventing-road-accidents (accessed March 2018).
- Public Health England. 2018. Reducing unintentional injuries in and around the home among children under five years. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/696646/Unintentional_injuries_under_fives_in_home.pdf (accessed July 2018).
- Public Health England. 2016. Road injury prevention: resources to support schools to promote safe active travel. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/505277/25_Feb16FINAL_DOCUMENT.pdf (accessed March 2018).
- Public Health England. 2014. Everybody active, every day: an evidence-based approach to physical activity. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/374914/ Framework_13.pdf (accessed July 2018).
- Royal Society for the Prevention of Accidents/Child Accident Prevention Trust/London Fire Brigade/Chief Fire Officers Association. 2016. Use of e-cigarettes (vaping) in the home: advice for parents. Available at: https://www.rospa.com/rospaweb/docs/advice-services/home-safety/vaping-in-the-home-advice-for-parents.pdf (accessed March 2018).

- ¹⁹ Public Health England. 2016. Improving outcomes and supporting transparency, Part 2: summary technical specifications of public health indicators. Available at: https://www.gov.uk/government/publications/public-health-outcomes-framework-2016-to-2019 (accessed March 2018).
- Department of Health. 2012. The Public Health Outcomes Framework for England, 2013–2016 (factsheet).

 Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216159/dh_132362.pdf (accessed March 2018).
- Royal Society for the Prevention of Accidents/Royal College of Emergency Medicine. 2017. Action to prevent falls. Available at: https://www.rospa.com/rospaweb/docs/advice-services/home-safety/falls-prevention-factsheet.pdf (accessed March 2018).
- ²² Chisholm A, Watson M, Jones S, Kendrick D. 2017. Child injury prevention: a survey of local authorities and health boards. International Journal of Health Promotion and Education. 5(4):205–214.
- ²³ British Medical Association. 2018. Feeling the squeeze: the local impact of cuts to public health budgets in England. Available at: https://www.bma.org.uk/collective-voice/policy-and-research/public-and-population-health/public-health-budgets (accessed September 2018).
- ²⁴ Royal Society for the Prevention of Accidents. 2013. Delivering accident prevention (context, accident prevention in practice, case studies and factsheets). Available at: https://www.rospa.com/public-health/delivering-accident-prevention/ (accessed March 2018).
- Royal College of Paediatrics and Child Health. 2017. State of Child Health Report 2017. Available at: https://www.rcpch.ac.uk/system/files/protected/page/SoCH%202017%20UK%20web%20updated.pdf (accessed March 2018).
- ²⁶ See reference 25.
- Public Health England. 2018. Reducing unintentional injuries on the roads among children and young people under 25 years. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/695781/Reducing_unintentional_injuries_on_the_roads_among_children_and_young_people_.pdf (accessed July 2018).
- ²⁸ See reference 27.
- Audit Commission/Healthcare Commission. 2007. Better safe than sorry: preventing unintentional injury to children. Available at: http://webarchive.nationalarchives.gov.uk/20081203030236/http://www.healthcarecommission.org.uk/_db/_documents/Better_Safe_Than_Sorry_Preventing_Unintentional_Injury_to_Children.pdf (accessed March 2018).
- Marmot M. 2010. Fair society, healthy lives. Available at: http://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf (accessed July 2018).
- ³¹ See reference 27.
- ³² Communities and Local Government Committee. 2018. Housing for older people. Available at: https://publications.parliament.uk/pa/cm201719/cmselect/cmcomloc/370/37002.htm (accessed March 2018).
- ³³ See reference 20.
- ³⁴ Public Health England. 2018. Public health profiles (Fingertips tool). Available at: https://fingertips.phe.org.uk/ (accessed March 2018).
- ³⁵ NHS Digital. No date cited. Emergency Care Data Set (ECDS). Available at: https://digital.nhs.uk/ECDS (accessed March 2018).
- ³⁶ Office for Product Safety and Standards. 2018. Strengthening national capacity for product safety: strategy 2018–2020. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733148/safety-and-standards-product-safety-strategy.pdf (accessed September 2018).
- ³⁷ Cardiff University. No date cited. Reducing violent crime. Available at: https://www.cardiff.ac.uk/research/impact-and-innovation/research-impact/reducing-violent-crime (accessed July 2018).
- ³⁸ Kendrick D, Young B, Mason-Jones A, Ilyas N, Achana F, Cooper N, Hubbard S, et al. 2012. Home Safety Education and Provision of Safety Equipment for Injury Prevention. Cochrane Database of Systematic Reviews (9).
- Royal Society for the Prevention of Accidents. 2005. Can the Home Ever be Safe? Available at: https://www.rospa.com/home-safety/advice/built-environment/ (accessed July 2018).
- ⁴⁰ Royal Society for the Prevention of Accidents. 2015. Thermostatic Mixing Valve campaign. Available at: https://www.rospa.com/campaigns-fundraising/success/tmv/ (accessed July 2018).

- ⁴¹ Public Health England. 2017. Health Profile for England. Available at: https://www.gov.uk/government/publications/health-profile-for-england/ (accessed July 2018).
- ⁴² Public Health England. 2017. Spatial planning for health: an evidence resource for planning and designing healthier places. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729727/spatial_planning_for_health.pdf (accessed September 2018).
- ⁴³ See reference 41.
- Royal Society for the Prevention of Accidents. 2018. RoSPA pedestrian safety policy paper.

 Available at: https://www.rospa.com/rospaweb/docs/advice-services/road-safety/pedestrians/pedestrian-policy-paper.

 pdf (accessed September 2018).
- Royal Society for the Prevention of Accidents. 2017. 20mph Zones and Speed Limits Factsheet.

 Available at: www.rospa.com/road-safety/advice/drivers/speed/20mph-zones-and-limits/ (accessed July 2018).
- ⁴⁶ Mayor of London. 2018. The Mayor's Transport Strategy. Available at: https://www.london.gov.uk/sites/default/files/mayors-transport-strategy-2018.pdf (accessed July 2018).
- ⁴⁷ Healthy Streets. No date cited. An introduction to healthy streets. Available at: https://healthystreets.com/home/about/ (accessed July 2018).
- ⁴⁸ Royal Society for the Prevention of Accidents. 2018. Road safety factsheet: autonomous vehicles. Available at: https://www.rospa.com/rospaweb/docs/advice-services/road-safety/vehicles/autonomous-vehicles.pdf (accessed September 2018).
- See reference 1.
- ⁵⁰ See reference 5.
- ⁵¹ See reference 15.
- Watson MC, Errington G. 2016. Preventing unintentional injuries in children: successful approaches. Paediatrics and Child Health. 26:5 (194–199).
- ⁵³ See reference 22.
- ⁵⁴ See reference 15.
- National Institute for Health and Care Excellence. 2010. Unintentional injuries: prevention strategies for under 15s. Available at: https://www.nice.org.uk/guidance/ph29/chapter/Introduction (accessed March 2018).
- ⁵⁶ See reference 15.
- ⁵⁷ See reference 22.
- ⁵⁸ HM Government. 2018. Working Together to Safeguard Children. A guide to inter-agency working to safeguard and promote the welfare of children. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/722305/Working_Together_to_Safeguard_Children_-_Guide.pdf (accessed July 2018).
- ⁵⁹ See reference 55.
- ⁶⁰ See reference 15.
- ⁶¹ See reference 38.
- Achana FA, Sutton AJ, Kendrick D, Wynn P, Young B, Jones DR, Hubbard SJ and Cooper NJ. 2015. The Effectiveness of Different Interventions to Promote Poison Prevention Behaviours in Households with Children: A Network Meta-Analysis. PLoS ONE. 10(4), e0121122.
- ⁶³ Hubbard SJ, Cooper N, Kendrick D, Young B, Wynn PM, He Z, Miller P, Achana F, Sutton A. 2014. Network meta-analysis to evaluate the effectiveness of interventions to prevent falls in children under age 5 years. Injury Prevention. First Published Online: July 25, 2014, doi:10.1136/injuryprev-2013–041135.
- ⁶⁴ Cooper NJ, Kendrick D, Achana F, Dhiman P, He Z, Wynn P, Le Cozannet E, Saramago P, Sutton AJ. 2012. Network metaanalysis to evaluate the effectiveness of different interventions to increase the prevalence of functioning smoke alarms in households with children. Epidemiologic Reviews. 34(1), 32–45.
- ⁶⁵ See reference 22.
- Watson MC, Mulvaney CA, Kendrick D, Stewart J, Coupland C, Hayes M, Wynn P. 2014. National survey of the injury prevention activities of children's centres. Health and Social Care in the Community. Volume 22, Issue 1 (40–46).

- ⁶⁷ See reference 55.
- Make it Safe. No date cited. What to look for in new blinds. Available at: https://www.makeitsafe.org.uk/resource/look-new-blinds (accessed March 2018).
- ⁶⁹ British Retail Consortium. 2017. Guidelines: nappy sacks. Available at: https://www.rospa.com/rospaweb/docs/campaigns-fundraising/nappy-sack-guidelines.pdf (accessed March 2018).
- Royal Society for the Prevention of Accidents. No date cited. Household cleaning products: Take Action Today, Put Them Away. Available at: https://www.rospa.com/home-safety/advice/child-safety/household-cleaning-products/ (accessed March 2018).
- ⁷¹ European Committee for Standardization. 2014. New European Standards will improve safety of window blinds and reduce risks to children. Available at: https://www.cen.eu/news/brief-news/Pages/News-2014-005.aspx (accessed March 2018).
- ⁷² Schwebel DC, Barton BK, Shen J, Wells HL, Bogar A, Heath G, McCullough D. 2014. Systematic Review and Meta-Analysis of Behavioral Interventions to Improve Child Pedestrian Safety. Journal of Pediatric Psychology. Volume 39, Issue 8 (826–845).
- Olivier J, Creighton P. 2017. Bicycle injuries and helmet use: a systematic review and meta-analysis. International Journal of Epidemiology. Volume 46, Issue 1 (278–292).
- Department for Transport. 2011. Avon Longitudinal Study of Parents and Children: Exposure to Injury Risk in the Road Environment and Reported Road Traffic Injuries in 13–14-year-olds. Available at: http://www.bristol.ac.uk/media-library/sites/ccah/migrated/documents/avonlongitudinalstudy.pdf (accessed July 2018).
- ⁷⁵ Transport for London. No date cited. STARS. Available at: https://stars.tfl.gov.uk/ (accessed March 2018).
- ⁷⁶ Modeshift STARS. No date cited. Modeshift STARS. Available at: https://www.modeshiftstars.org/ (accessed March 2018).
- ⁷⁷ Road Safety Knowledge Centre. 2010. Kerbcraft. Available at: http://www.roadsafetyknowledgecentre.org.uk/knowledge/193.html (accessed July 2018).
- ⁷⁸ Transport for London. No date cited. Youth Travel Ambassadors. Available at: https://tfl.gov.uk/info-for/schools-and-young-people/teaching-resources/youth-travel-ambassadors?intcmp=14802 (accessed March 2018).
- ⁷⁹ Road Safety Observatory. 2017. Child pedestrians. Available at: http://www.roadsafetyobservatory.com/Review/10075 (accessed March 2018).
- PSHE Association. 2018. A curriculum for life: the case for statutory PSHE education. Available at: https://www.pshe-association.org.uk/curriculum-and-resources/resources/curriculum-life-case-statutory-pshe-education (accessed March 2018).
- Department for Education. 2018. Relationships Education, Relationships and Sex Education, and Health Education in England. Available at: https://consult.education.gov.uk/pshe/relationships-education-rse-health-education/supporting_documents/Final%20Consultation%20and%20response.pdf (accessed July 2018).
- Sissons Joshi M, Stevens C. 2014. The effectiveness of safety education at alerting children to daily risks. Available at: https://www.rospa.com/rospaweb/docs/research/safety-education.pdf (accessed March 2018).
- Amateur Swimming Association. 2014. Taking school swimming seriously. The 2014 school swimming census. Available at http://www.swimming.org/schoolswimming/school-swimming-census-findings-revealed-today/ (accessed March 2018).
- National Water Safety Forum. 2016. The UK Drowning Prevention Strategy 2016–2026. Available at: http://www.nationalwatersafety.org.uk/strategy/info/uk-drowning-prevention-strategy.pdf (accessed March 2018).
- 85 Swim England/RNLI. No date cited. Swim Safe. Available at: https://swimsafe.org.uk/ (accessed March 2018).
- ⁸⁶ See reference 1.
- ⁸⁷ See reference 5.
- Steinberg L. 2008. A social neuroscience perspective on adolescent risk-taking. Developmental Review. 28(1): 78–106. Available at: http://faculty.weber.edu/eamsel/Research%20Groups/Dual%20PRocess%20Research/New%20Papers/Steinberg%20(2008).pdf (accessed March 2018).
- 89 See reference 88.
- 90 See reference 88.

- ⁹¹ Royal Society for the Prevention of Accidents. 2017. Road injuries killing adolescents. Available at: https://www.rospa.com/lets-talk-about/2017/may/road-injuries-killing-adolescents/ (accessed March 2018).
- ⁹² Department for Transport. 2013. Novice drivers: Evidence review and Evaluation Pre-driver training, Graduated Driver Licensing. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/249282/novice-driver-research-findings.pdf (accessed March 2018).
- Department for Transport. 2017. Reported Road Casualties Great Britain: 2016 Annual Report. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/668504/reported-road-casualties-great-britain-2016-complete-report.pdf (accessed July 2018).
- ⁹⁴ See reference 93.
- 95 See reference 93.
- ⁹⁶ See reference 25.
- Department for Transport. 2011. Avon Longitudinal Study of Parents and Children: Exposure to Injury Risk in the Road Environment and Reported Road Traffic Injuries in 16-year-olds. Available at: http://eprints.uwe.ac.uk/20893/1/avon-longitudinal-risk-injuries-16-year-olds-fullreport.pdf (accessed July 2018).
- Transport Research Laboratory. 2013. Novice Drivers: evidence review and evaluation. Pre-driver education and training, graduated driver licensing and the New Drivers Act. Available at: https://trl.co.uk/news/prev/4238 (accessed February 2018).
- ⁹⁹ Road Safety Observatory. 2018. Young drivers review. Available at: http://www.roadsafetyobservatory.com/Review/10043 (accessed March 2018).
- ¹⁰⁰ See reference 99.
- ¹⁰¹ See reference 99.
- ¹⁰² Transport Research Laboratory. 2016. A review of interventions which seek to increase the safety of young and novice drivers. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/609828/interventions-to-increase-young-and-novice-driver-safety.pdf (accessed March 2018).
- ¹⁰³ See reference 99.
- ¹⁰⁴ See reference 98.
- ¹⁰⁵ RAC Foundation. 2014. Young driver safety. A public attitude survey. Available at: https://www.racfoundation.org/assets/rac_foundation/content/downloadables/ipsos_mori_young_driver_safety_survey_final_june_2014.pdf (accessed March 2018).
- Royal Society for Public Health. 2017. Drug safety testing at festivals and nightclubs. Available at: https://www.rsph.org.uk/uploads/assets/uploaded/c4b58b1a-431a-4459-ab769978b8e15fcf.pdf (accessed March 2018).
- Maritime and Coastguard Agency. No date cited. Tombstoning: safety advice. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/303215/Tombstoning.pdf (accessed September 2018).
- RoSPA analysis of data related to falls among 15 to 24 year olds from the Trauma Audit and Research Network, 2012/13–2016/17.
- ¹⁰⁹ See reference 84.
- ¹¹⁰ See reference 84.
- ¹¹¹ RNLI. Not date cited. Respect the Water. Available at: https://rnli.org/safety/respect-the-water (accessed July 2018).
- ¹¹² See reference 84.
- ¹¹³ Each Amazing Breath. No date cited. Take Five at School. Available at: http://www.eachamazingbreath.org/about/take-five-at-school (accessed July 2018).
- ¹¹⁴ Berry A. 2015, p.8 cited in: Each Amazing Breath. 2015. Quantitative and Qualitative Report on the Impact of "Take Five" at School.
- ¹¹⁵ See reference 81.
- ¹¹⁶ Safety Groups UK. No date cited. LOcHER. Available at: http://www.safetygroupsuk.org.uk/campaigns/locher (accessed July 2018).
- ¹¹⁷ See reference 1.

- ¹¹⁸ See reference 5.
- ¹¹⁹ Public Health England. 2017. The importance of health and work. Available at: https://www.gov.uk/government/publications/health-and-work-infographics/the-importance-of-health-and-work (accessed April 2018).
- Health and Safety Executive. 2017. RIDREG RIDDOR reported fatal and non-fatal injuries in Great Britain by country, region, county and local authority. Available at: http://www.hse.gov.uk/statistics/tables/index.htm#riddor (accessed April 2018).
- Health and Safety Executive. 2017. Health and safety at work: summary statistics for Great Britain 2017. Available at: http://www.hse.gov.uk/statistics/overall/hssh1617.pdf (accessed April 2018).
- ¹²² Department for Transport. 2015. Working together to build a safer road system: British Road Safety Statement. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/487949/british_road_safety_statement_web.pdf (accessed March 2018).
- ¹²³ Royal Society for the Prevention of Accidents. 2017. Our current campaigns. Available at: https://www.rospa.com/campaigns-fundraising/current (accessed April 2018).
- Department for Transport. 2017. Truck platooning: UK road trial feasibility study. Available at: https://www.gov.uk/government/publications/truck-platooning-uk-road-trial-feasibility-study (accessed April 2018).
- ¹²⁵ GATEway project. 2018. About. Available at: https://gateway-project.org.uk/about (accessed April 2018).
- ¹²⁶ Driving for Better Business. 2018. Available at: www.drivingforbetterbusiness.com (accessed July 2018).
- ¹²⁷ Driving for Better Business. No date cited. Work-related road risk: senior management briefing sheet. Available at: https://www.drivingforbetterbusiness.com/wp-content/uploads/2018/05/Director-Briefing-Sheet.pdf (accessed July 2018).
- ¹²⁸ See reference 122.
- ¹²⁹ Health and Safety Executive. 2014. Driving at work: managing work-related road safety. Available at: http://www.hse.gov.uk/pubns/indg382.pdf (accessed April 2018).
- ¹³⁰ See reference 120.
- ¹³¹ RoSPA analysis of historical Health and Safety Executive figures.
- Health and Safety Executive. 2017. Historical picture: Trends in work-related ill health and workplace injury in Great Britain, 2017. Available at: http://www.hse.gov.uk/STATISTICS/history/historical-picture.pdf (accessed April 2018).
- ¹³³ See reference 121.
- ¹³⁴ See reference 121.
- ¹³⁵ Health and Safety Executive. 2011/12. Preventing slips and trips at work: a brief guide. Available at: http://www.hse.gov. uk/pubns/indg225.pdf (accessed September 2018).
- ¹³⁶ Royal Society for the Prevention of Accidents. 2018. Safety and health awareness day (SHAD) resources. Available at: https://www.rospa.com/campaigns-fundraising/current/keeping-kids-safe/brighter-beginnings-appeal/shad-resources (accessed September 2018).
- ¹³⁷ Office for National Statistics. 2017. National population projections, 2016-based statistical bulletin. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2016basedstatisticalbulletin#a-growing-number-of-older-people (accessed March 2018).
- ¹³⁸ Alzheimer's Society. 2015. Dementia 2015: aiming higher to transform lives. Available at: https://www.alzheimers.org. uk/download/downloads/id/2700/dementia_2015_aiming_higher_to_transform_lives.pdf (accessed March 2018).
- ¹³⁹ National Institute for Health Research. 2017. NIHR theme 2017: complex health and care needs in older people. Available at: https://www.nihr.ac.uk/news/nihr-theme-2017-complex-health-and-care-needs-in-older-people/6467 (accessed July 2018).
- ¹⁴⁰ See reference 1.
- ¹⁴¹ See reference 5.
- ¹⁴² Public Health England. 2017. Falls and fracture consensus statement: supporting commissioning for prevention. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/586382/falls_and_fractures_consensus_statement.pdf (accessed March 2018).
- ¹⁴³ See reference 12.

- ¹⁴⁴ See reference 12.
- ¹⁴⁵ National Osteoporosis Society. 2015. Effective secondary prevention of fragility fractures: clinical standards for fracture liaison services. Available at: https://staging.nos.org.uk/media/1776/clinical-standards-report.pdf (accessed March 2018).
- ¹⁴⁶ See reference 1.
- Royal College of Physicians. 2017. National Hip Fracture Database (NHFD): annual report 2017. Available at: http://www.nhfd.co.uk/2017report (accessed March 2018).
- ¹⁴⁸ See reference 21.
- ¹⁴⁹ Warwickshire County Council. 2017. Everyone in Warwickshire counts: valuing the vulnerable. Director of public health annual report 2017. Available at: https://apps.warwickshire.gov.uk/api/documents/WCCC-630-1310 (accessed March 2018).
- ¹⁵⁰ See reference 32.
- ¹⁵¹ See reference 32.
- ¹⁵² Centre for Ageing Better. 2017. Room to improve: the role of home adaptations in improving later life. Available at: www. ageing-better.org.uk/publications/room-improve-role-home-adaptations-improving-later-life (accessed March 2018).
- ¹⁵³ See reference 148.
- ¹⁵⁴ See reference 142.
- Home Office. 2017. Focus on trends in fires and fire-related fatalities. Available at: https://assets.publishing.service. gov.uk/government/uploads/system/uploads/attachment_data/file/650869/focus-trends-fires-fatalities-oct17.pdf (accessed September 2018).
- Home Office. 2017. Detailed analysis of fires attended by fire and rescue services, England, April 2016 to March 2017. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/650926/detailed-analysis-fires-attended-fire-rescue-england-hosb1617.pdf (accessed September 2018).
- ¹⁵⁷ Staffordshire Fire and Rescue Service. No date cited. Fire death factors. Available at: https://www.staffordshirefire.gov.uk/ your-safety/campaigns/fire-death-factors/ (accessed July 2018).
- ¹⁵⁸ Staffordshire Fire and Rescue Service. No date cited. Safe and well. Available at: http://www.staffordshirefire.gov.uk/ your-safety/safe-and-well/ (accessed March 2018).
- National Institute for Health and Care Excellence. 2016. Winter Warmth Pilot with Public Health England (PHE).
 Available at: https://www.nice.org.uk/sharedlearning/winter-warmth-pilot-with-public-health-england-phe (accessed March 2018).
- ¹⁶⁰ Hindle L. 2016. Preventing fires and protecting health. Featured on Public health matters [blog]. Available at: https://publichealthmatters.blog.gov.uk/2016/12/15/preventing-fires-and-protecting-health (accessed July 2018).
- White J. 2016. Fire and Rescue Services as a health asset. Featured on NHS England [blog]. 2016. Available at: https://www.england.nhs.uk/blog/jacquie-white-3/ (accessed July 2018).
- ¹⁶² Independent Age. 2017. Behind the wheel: tips for safe and confident driving in later life. Available at: https://www.independentage.org/sites/default/files/2017-09/Advice-Guide-Behind-the-wheel_0.pdf (accessed March 2018).
- ¹⁶³ Department for Transport. 2015. National Travel Survey: 2014. Available from: https://www.gov.uk/government/statistics/national-travel-survey-2014 (accessed March 2018).
- ¹⁶⁴ See reference 93.
- ¹⁶⁵ Road Safety Observatory. 2017. Older drivers review. Available at: http://www.roadsafetyobservatory.com/Review/10045 (accessed March 2018).
- ¹⁶⁶ See reference 122.
- ¹⁶⁷ See reference 165.
- ¹⁶⁸ See reference 93.
- ¹⁶⁹ Older Drivers Task Force. 2016. Supporting safe driving into old age: a national older driver strategy. Available at: http://roadsafetyfoundation.org/making-older-drivers-safer-longer (accessed March 2018).

- ¹⁷⁰ See reference 169.
- Poulter DR, Wann JP. 2013. Errors in motion processing amongst older drivers may increase accident risk. Accident Analysis & Prevention. 2013:57(150–156). Available at: https://www.sciencedirect.com/science/article/pii/S0001457513001292 (accessed March 2018).
- ¹⁷² Alzheimer's Society. No date cited. Driving. Available at: https://www.alzheimers.org.uk/info/20030/staying_independent/27/driving (accessed March 2018).
- ¹⁷³ See reference 165.
- ¹⁷⁴ See reference 165.
- ¹⁷⁵ See reference 165.
- ¹⁷⁶ See reference 93.
- ¹⁷⁷ Department for Transport. 2004. Older pedestrians: a critical review of the literature. Available at: http://webarchive. nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/roadsafety/research/rsrr/theme1/olderpedestriansacriticalrev.Pdf (accessed March 2018).
- ¹⁷⁸ Transport for London. 2013. Older pedestrians and road safety: research debrief. Available at: http://content.tfl.gov.uk/older-pedestrians-research-report.pdf (accessed March 2018).
- ¹⁷⁹ See reference 177.
- ¹⁸⁰ Northamptonshire County Council. 2018. Standing up for ourselves in Northamptonshire to prevent falls. Available at: https://www3.northamptonshire.gov.uk/councilservices/health/preventing-falls/Pages/default.aspx (accessed September 2018).

Appendix 1: Links to other issues on the public health agenda

This table sets out how the recommended actions align to other issues on the public health agenda, based on indicators from the Public Health Outcomes Framework.

No.	Action	Injury-related public health indicator	Links to other public health indicators
		Strategic recommendations	
1	Where there are health inequalities due to links between poverty and injury rates, address these as a priority.	1.10 Killed and seriously injured casualties	1.01 Children in low income families
		on England's roads	4.01 Infant mortality
		2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25	4.03 Mortality rate from causes considered preventable
		2.24 Injuries due to falls in people aged 65 and over	4.13 Health-related quality of life for older people
		4.14 Hip fractures in people aged 65 and over	
2	the Emergency Care Data Set is made easily	1.10 Killed and seriously injured casualties on England's roads	
	accessible to local and national practitioners, enabling them to monitor injury trends, set priorities and evaluate interventions.	2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25	
		2.24 Injuries due to falls in people aged 65 and over	
		4.14 Hip fractures in people aged 65 and over	
	Establish better accident-related data sharing among local agencies, to aid the identification of accident prevention priorities and the subsequent evaluation of interventions.	1.10 Killed and seriously injured casualties on England's roads	4.01 Infant mortality
		3	4.03 Mortality rate from causes
		2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25	considered preventable
		2.24 Injuries due to falls in people aged 65 and over	
		4.14 Hip fractures in people aged 65 and over	
	Advocate for the provision of homes that are safer by design.	2.07 Hospital admissions caused by	1.01 Children in low income families
		unintentional and deliberate injuries for children and young people under 25	2.23 Self-reported well-being
		2.24 Injuries due to falls in people aged	4.01 Infant mortality
		65 and over 4.14 Hip fractures in people aged 65 and over	4.03 Mortality rate from causes considered preventable
		4.14 mp nactures in people agea of and over	4.13 Health-related quality of life for older people
	Make meeting the needs of vulnerable road	1.10 Killed and seriously injured casualties	1.01 Children in low income families
	users – pedestrians, cyclists, children and older people – a priority in local planning processes,		2.23 Self-reported well-being
	with particular attention paid to lower speeds in built-up areas and with active travel promoted as a positive option.	2.24 Injuries due to falls in people aged 65 and over	2.13 Proportion of physically active and inactive adults
		4.14 Hip fractures in people aged 65 and over	4.03 Mortality rate from causes considered preventable
			4.13 Health-related quality of life

No.	Action	Injury-related public health indicator	Links to other public health indicators	
		Children (0–14)		
6	Ensure that a senior manager is designated the lead for child injury prevention so programmes are delivered in an integrated and systematic way and are supported by an injury prevention strategy and a multiagency injury prevention group.	1.10 Killed and seriously injured casualties	1.01 Children in low income families	
		on England's roads	4.01 Infant mortality	
		2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25	4.03 Mortality rate from causes considered preventable	
7	Support capacity-building through the provision of support and training for practitioners who work with children and	1.10 Killed and seriously injured casualties on England's roads	1.01 Children in low income families	
		2.07 Hospital admissions caused by	4.01 Infant mortality	
	families, enabling them to maximise the delivery of safety education for parents and carers, with families at higher risk of injury also being signposted to a home safety assessment and equipment.	unintentional and deliberate injuries for children and young people under 25	4.03 Mortality rate from causes considered preventable	
8	Develop age-appropriate injury	1.10 Killed and seriously injured casualties	1.01 Children in low income families	
	prevention topics for each Healthy Child Programme contact.	on England's roads	4.01 Infant mortality	
		2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25	4.03 Mortality rate from causes considered preventable	
9	Work in partnership to identify and address	2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25	1.01 Children in low income families	
	emerging issues related to the safety of consumer products and children.		4.01 Infant mortality	
		3 F	4.03 Mortality rate from causes considered preventable	
10	Ensure that children at Key Stages 1 and 2	1.10 Killed and seriously injured casualties	1.01 Children in low income families	
tra	nave opportunities to undertake pedestrian training, with a particular focus on	on England's roads 2.07 Hospital admissions caused by	1.16 Utilisation of outdoor space for exercise/ health reasons	
	promoting safe and active travel.	unintentional and deliberate injuries for children and young people under 25	4.03 Mortality rate from causes considered preventable	
11	Ensure that the prevention of accidental	1.10 Killed and seriously injured casualties	1.01 Children in low income families	
	injuries is a core topic within the new compulsory health education curriculum for all schools.	on England's roads 2.07 Hospital admissions caused by	1.16 Utilisation of outdoor space for exercise/ health reasons	
		unintentional and deliberate injuries for children and young people under 25	2.23 Self-reported well-being	
		emaren and goding people ander 25	4.03 Mortality rate from causes considered preventable	
12	Support the delivery of the UK Drowning Prevention Strategy, with a particular focus on promoting learn-to-swim and water safety education in schools.	2.07 Hospital admissions caused by	1.01 Children in low income families	
		unintentional and deliberate injuries for children and young people under 25	1.16 Utilisation of outdoor space for exercise/ health reasons	
			4.03 Mortality rate from causes considered preventable	

No.	Action	Injury-related public health indicator	Links to other public health indicators	
		Young people (15–24)		
13	Act on the findings of the controlled evaluation of approaches to young driver safety (expected in 2020), taking steps towards implementing	1.10 Killed and seriously injured casualties on England's roads	4.03 Mortality rate from causes considered preventable	
	a graduated driver licensing system if none of the other approaches are found to show the same promise.	2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25		
14	Ensure that the prevention of accidental injuries is a core topic within the new compulsory health education curriculum for all schools.	1.10 Killed and seriously injured casualties on England's roads	1.16 Utilisation of outdoor space for exercise/ health reasons	
		2.07 Hospital admissions caused by	2.23 Self-reported well-being	
		unintentional and deliberate injuries for children and young people under 25	4.03 Mortality rate from causes considered preventable	
15	Support the delivery of the UK Drowning Prevention Strategy, with a particular focus	2.07 Hospital admissions caused by unintentional and deliberate injuries for	1.16 Utilisation of outdoor space for exercise/ health reasons	
	on increasing young people's awareness of everyday risks in, on and around water and	children and young people under 25	2.18 Alcohol-related admissions to hospital	
	incorporating these risks in community-level water safety risk assessments and water safety plans.		4.03 Mortality rate from causes considered preventable	
16	Research the contributory factors leading to accidental harm to young people who	2.07 Hospital admissions caused by unintentional and deliberate injuries for	2.15 Drug and alcohol treatment completion and drug misuse deaths	
	misuse drugs (legal or illegal) and potential preventative interventions.	children and young people under 25	4.03 Mortality rate from causes considered preventable	
17	Research the contributory factors leading to accidental falls among young people and	2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25	1.16 Utilisation of outdoor space for exercise/ health reasons	
	potential preventative interventions.		2.18 Alcohol-related admissions to hospital	
			4.03 Mortality rate from causes considered preventable	
		Adults (25–64)		
18	Encourage the collection of data on absence		1.09 Sickness absence rate	
	from work that results from accidents that happen away from work – either		2.23 Self-reported well-being	
	to workers or those for whom they have caring responsibilities.		4.03 Mortality rate from causes considered preventable	
19	Help employers to understand their duty to		1.09 Sickness absence rate	
	manage the risks their staff face and create when using the road for work, and encourage the collection of work-related road accident figures and the evaluation of current work-related road safety interventions.	on England's roads	4.03 Mortality rate from causes considered preventable	
20	Develop a network of higher-performing	1.10 Killed and seriously injured casualties	1.09 Sickness absence rate	
	organisations that can lead the way on developing the evidence basis for	on England's roads	4.03 Mortality rate from causes	
	"carry over" safety programmes from the workplace into other parts of life, particularly on falls prevention.	2.07 Hospital admissions caused by unintentional and deliberate injuries for children and young people under 25	considered preventable	
		2.24 Injuries due to falls in people aged 65 and over		
		4.14 Hip fractures in people aged 65 and over		

No.	Action	Injury-related public health indicator	Links to other public health indicators
21	Research the contributory factors leading to accidental harm to people of working age who		2.15 Drug and alcohol treatment completion and drug misuse deaths
	misuse drugs (legal or illegal) and potential preventative interventions.		4.03 Mortality rate from causes considered preventable
		Older people (over 65)	
22	Implement the recommendations of the National Falls Consensus Statement, ensuring	2.24 Injuries due to falls in people aged 65 and over	1.16 Utilisation of outdoor space for exercise/ health reasons
	that primary falls prevention is included in local plans and strategies alongside robust	4.14 Hip fractures in people aged 65 and over	1.18 Social isolation
	mechanisms for those who have already fallen.		2.23 Self-reported well-being
			4.03 Mortality rate from causes considered preventable
			4.11 Emergency readmissions within 30 days of discharge from hospital
			4.13 Health-related quality of life for older people
			4.15 Excess winter deaths
23	Promote and support the development of local partnerships to enable the roll-out of home safety visits that seek to address multiple safety and health issues e.g. fire safety, falls prevention and other aspects of health and wellbeing.	2.24 Injuries due to falls in people aged	1.18 Social isolation
		65 and over	2.23 Self-reported well-being
		4.14 Hip fractures in people aged 65 and over	4.03 Mortality rate from causes considered preventable
			4.13 Health-related quality of life for older people
			4.15 Excess winter deaths
24	Promote self-assessment tools as a first step	1.10 Killed and seriously injured casualties	1.18 Social isolation
	towards older drivers thinking about how they can drive safer for longer, with signposting to further sources of help and information about alternative methods of transport.	posting to	4.03 Mortality rate from causes considered preventable
			4.13 Health-related quality of life for older people
25	Research the contributory factors leading to accidental harm to older people who misuse drugs (legal or illegal) and potential preventative interventions.		2.15 Drug and alcohol treatment completion and drug misuse deaths
			4.03 Mortality rate from causes considered preventable
			4.13 Health-related quality of life for older people

Appendix 2: Existing policy drivers

A range of policy drivers promote action on accident prevention, but with many of these covering specific age groups (e.g. under-5s or older people) or types of accident (e.g. home accidents), it can be difficult for decision-makers and practitioners to adopt a truly strategic approach to prevention. Here, we list the main policy drivers influencing accident prevention.

Published by	Title/Year	Web link	Children (0–14)	Young people (15–24)	Adults (25–64)	Older people (65+)
АҮРН	A public health approach to promoting young people's resilience (2016)	www.youngpeopleshealth.org.uk/wp-content/ uploads/2016/03/resilience-resource-15-march- version.pdf	— (0-1 -1)	(13 24) X	—(23-0 4)	(631)
CLGC	Housing for older people: Second Report of Session 2017–19 (2018)	www.parliament.uk/business/committees/ committees-a-z/commons-select/communities-and- local-government-committee/news-parliament-2017/ housing-for-older-people-report-17-19				x
DfT	Working Together to Build a Safer Road System: British Road Safety Statement (2015)	www.gov.uk/government/uploads/system/uploads/ attachment_data/file/487949/british_road_safety_ statement_web.pdf	х	х	х	x
DfT	Novice drivers: evidence review and evaluation, pre-driver training and Graduated Driver Licensing (2013)	www.gov.uk/government/uploads/system/uploads/ attachment_data/file/249282/novice-driver-research- findings.pdf		х		
GOS	Future of an ageing population: evidence review (2014)	www.gov.uk/government/publications/future-of- ageing-adapting-homes-and-neighbourhoods				x
HSE	Sector plans (2017)	www.hse.gov.uk/aboutus/strategiesandplans/sector- plans			х	
HSE	Health priority plans (2017)	www.hse.gov.uk/aboutus/strategiesandplans/health- and-work-strategy			х	
HSE	Helping Great Britain work well (2016)	www.hse.gov.uk/strategy			х	
HSE	Driving at work: managing work-related road safety (2014)	www.hse.gov.uk/pubns/indg382.pdf			х	
LT	Sudden infant death syndrome: a guide for professionals (2013)	www.lullabytrust.org.uk/wp-content/uploads/sids- guide-professionals.pdf	х			
NHSRC	Falls and Fragility Fractures Pathway (2013)	www.england.nhs.uk/rightcare/products/pathways/ falls-and-fragility-fractures-pathway				X
NICE	NICEimpact: falls and fragility fractures (2018)	www.nice.org.uk/media/default/about/what-we-do/ into-practice/measuring-uptake/nice-impact-falls- and-fragility-fractures.pdf				х
NICE	Quality standard QS107: Preventing unintentional injury in under 15s (2016)	https://www.nice.org.uk/guidance/qs107	х			
NICE	Strategies to prevent unintentional injuries among children and young people aged under 15: Evidence Update (2013)	www.nice.org.uk/guidance/ph29/evidence/strategies- to-prevent-unintentional-injuries-among-under15s- evidence-update-67472317	х			
NICE	CG161: Falls in older people: assessing risk and prevention (2013)	www.nice.org.uk/guidance/cg161				х
NICE	CG124: Hip fracture: management (2011)	www.nice.org.uk/guidance/cg124				x
NICE	PH29: Strategies to prevent unintentional injuries among children and young people aged under 15 (2010)	www.nice.org.uk/guidance/ph29	х			
NICE	PH30: Preventing unintentional injuries in the home among children and young people aged under 15 (2010)	www.nice.org.uk/guidance/ph30	х			
NICE	PH31: Unintentional injuries on the road: interventions for under 15s (2010)	www.nice.org.uk/guidance/ph31	х			
NICE	Interventions to prevent accidental injury to young people aged 15–24: Evidence briefing (2006)	https://injuryobservatory.net/wp-content/ uploads/2012/08/Child-Tools-2006-Intervention.pdf		Х		

Published by	Title/Year	Web link	Children (0–14)	Young people (15–24)	Adults (25–64)	Older people (65+)
NWSF	A future without drowning: the UK Drowning Prevention Strategy 2016–2026	http://www.nationalwatersafety.org.uk/strategy	Х	х	х	х
ODTF	Supporting safe driving into old age (2016)	http://roadsafetyfoundation.org/making-older-drivers- safer-longer				x
OPSS	Strengthening national capacity for product safety: strategy 2018-2020 (2018)	https://assets.publishing.service.gov.uk/government/ uploads/system/uploads/attachment_data/ file/733148/safety-and-standards-product-safety- strategy.pdf	х	x	х	х
PHE	Reducing unintentional injuries on the roads among children and young people under 25 years (2018)	https://assets.publishing.service.gov.uk/government/ uploads/system/uploads/attachment_data/ file/695781/Reducing_unintentional_injuries_on_ the_roads_among_children_and_young_peoplepdf	x	x		
PHE	Reducing unintentional injuries in and around the home among children under five years (2018)	https://assets.publishing.service.gov.uk/government/ uploads/system/uploads/attachment_data/ file/696646/Unintentional_injuries_under_fives_in home.pdf	x			
PHE	Falls: Applying All Our Health (2018)	www.gov.uk/government/publications/falls-applying- all-our-health/falls-applying-all-our-health				x
PHE	A return on investment tool for the assessment of falls prevention programmes for older people living in the community (2018)	https://assets.publishing.service.gov.uk/government/ uploads/system/uploads/attachment_data/ file/679856/A_return_on_investment_tool_for_falls_ prevention_programmes.pdf				x
PHE	Unintentional injuries: prevention in children under 5 years (2017)	www.gov.uk/government/publications/unintentional- injuries-prevention-in-children-under-5-years	х			
PHE	Falls and fracture consensus statement: supporting commissioning for prevention (2017)	www.gov.uk/government/publications/falls-and- fractures-consensus-statement				х
PHE	Falls and fracture consensus statement: resource pack (2017)	www.gov.uk/government/uploads/system/uploads/ attachment_data/file/628732/Falls_and_fracture_ consensus_statement_resource_pack.pdf				х
PHE	Spatial planning for health: an evidence resource for planning and designing healthier places (2017)	https://assets.publishing.service.gov.uk/government/ uploads/system/uploads/attachment_data/ file/729727/spatial_planning_for_health.pdf	Х	х	х	x
PHE	Road injury prevention: resources to support schools to promote safe active travel (2016)	https://assets.publishing.service.gov.uk/government/ uploads/system/uploads/attachment_data/ file/505277/25_Feb16FINAL_DOCUMENT.pdf	х	х		
PHE	The Scientific Advisory Committee on Nutrition (SACN) vitamin D and health report (2016)	www.gov.uk/government/publications/sacn-vitamin-d- and-health-report				x
PHE	Public Health Outcomes Framework (2012)	www.phoutcomes.info	х	х	х	x
RCPCH	State of Child Health Report 2017	www.rcpch.ac.uk/state-of-child-health	х	x		
RoSPA	Delivering accident prevention at local level in the new public health system (2013)	https://www.rospa.com/public-health/delivering- accident-prevention	Х	x	х	х
RSPH	Drug safety testing at festivals and night clubs (2017)	www.rsph.org.uk/uploads/assets/uploaded/c4b58b1a- 431a-4459-ab769978b8e15fcf.pdf		X		
WHO	Global report on falls prevention in older age (2007)	www.who.int/ageing/publications/Falls_ prevention7March.pdf				X

Abbreviations

Association for Young People's Health National Water Safety Forum **AYPH** NWSF CLGC Communities and Local Government Committee **ODTF** Older Drivers Task Force DfT **OPSS** Office for Product Safety and Standards Department for Transport GOS Government Office for Science Public Health England PHE **HSE** Health and Safety Executive **RCPCH** Royal College of Paediatrics and Child Health LT The Lullaby Trust **RoSPA** Royal Society for the Prevention of Accidents NHSRC NHS RightCare **RSPH** Royal Society for Public Health National Institute for Health and Care Excellence **NICE** WHO World Health Organisation



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