ROSPA

accidents don't have to happen

The Royal Society for the Prevention of Accidents

Safer Lives, Stronger Nation:

Our Call for a National Accident Prevention Strategy

In partnership with Speedy Hire

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Safer Lives, Stronger Nation: Our Call for a National Accident Prevention Strategy
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Foreword

This report was born out of a simple question: how many accidents are there in the UK? It seems bizarre that such a straightforward question should prove so complex to answer but it is that complexity which has allowed accidents to become a major public health and economic issue for the UK, with the accidental death rate having soared by 42% over the last decade.

Imagine if research and treatment for every different type of cancer was managed by dozens of different Government departments and agencies, with little or no interaction and no reporting on the total impact on the nation. Clearly that would be unworkable, and yet this is the situation we are in with accidents.

For much of the 20th century, UK standards and legislation were the global north star for accident prevention. Like any asset, the UK's position required maintenance, investment, and new thinking. Sadly, as this report shows, twenty years of complacency, fragmentation, and malaise have led to the UK falling behind our global peers.

The findings in this report make uncomfortable reading, not just for politicians, economists, and healthcare professionals but also for every member of the public. Our loved ones, family members, friends, and colleagues are all substantially more likely to suffer a serious accident than they were 20 years ago. This means thousands more lives irreparably devastated. The tragedy of this is that, as we know at RoSPA: accidents don't have to happen. Indeed, what this report shows in many ways is new people having old preventable accidents.

The policy solutions we recommend in this report are not unique. Most have been implemented previously, in many cases in the UK itself. This is because the types of accidents people are having are not new, making it all the more incomprehensible that accident rates have been allowed to soar. If the Government's manifesto commitment *"to embed a greater focus on prevention throughout the entire healthcare system"* is appropriate anywhere, it is in accident prevention.

For businesses this creates a host of challenges. Companies like Speedy Hire have long put accident prevention at the heart of what they do. With 3,400 employees across the UK, Ireland and Kazakhstan (operating on 150 sites), this is no easy task. Speedy Hire's commitment is reflected in 10 successive RoSPA Occupational Health and Safety gold awards and exceptional performance in this field. However, preventing accidents is becoming increasingly difficult because of the loss of sector-specific health and safety skills and declining quality in the public realm. As an organisation which takes a whole person, whole life approach, they believe employee safety doesn't begin and end at the workplace door.

Preventable accidents, the majority of which happen at home, now cost employers ten times as many working days as strikes.

As this report highlights, accidents cost businesses billions of pounds every year. UK business recognised decades ago that as well as a moral obligation to keep employees safe, there is a very simple business case. Talk to any employer in the UK and they'll tell you how challenging it can be to recruit staff with the right skills. Employers take great care to ensure that the people they invest so much into in terms of recruiting and training have the skills they need to meet the changing demands of work today. Preventable accidents, the majority of which happen at home, now cost employers ten times as many working days as strikes.

At RoSPA, we have known for more than 100 years that accidents are most commonly caused by complacency: the thing we know we really should fix that is instead left unrepaired, the task we decide to cut a corner on. This report shows that for too long the UK has proudly but mistakenly assumed that its safety systems are 'good enough'. We hope the trends we have identified will act as the moment the nation realises that it has actually been asleep at the wheel – that the time for system change has arrived.

No business facing a problem as large as this would try to address it without a plan. And no problem of this magnitude can be tackled without the intervention of Government. As such, we are calling on Government to appoint a fixed-term Minister without Portfolio tasked with developing a National Accident Prevention Strategy. Something the Australian, Finnish, and Indian Governments are already doing. This report sets out our view on what we believe that strategy should contain. While the evidence in this report is new, the solutions are tried and tested at home and abroad.

If the Government acts now, it is no exaggeration to say hundreds of thousands of lives and billions of pounds could be saved because the mission we were founded on remains as true today as it was 100 years ago: accidents don't have to happen.

Rebecca Hickman,
Chief Executive Officer, RoSPA

Dan Evans,
Chief Executive, Speedy Hire

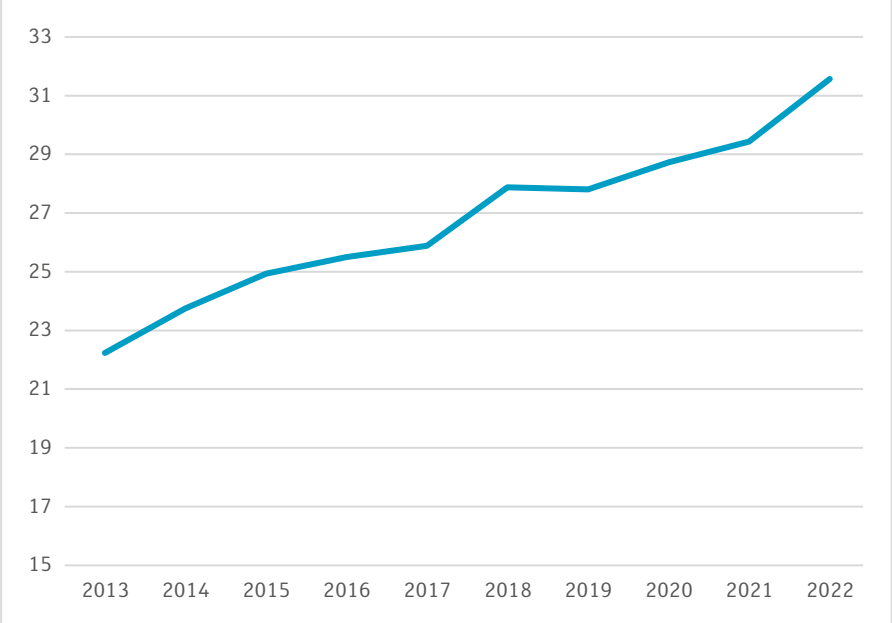
The UK's accident crisis

The UK was once a world leader in accident prevention. This means that huge strides have been made in reducing preventable injuries over the past century, in the UK and around the globe. But times have changed. A major review of accident data by RoSPA has uncovered the full scale of accidental injuries in the UK for the first time in decades and our findings are alarming. After years of inaction, policy fragmentation and limited investment, accident rates are rising steeply in the UK, reversing years of progress and creating an accident crisis:

- Over the last decade, **accidental death rates have risen sharply** – by 42%.
- **21,336 people died of accidents** in 2022, enough to fill London's O2 Arena.
- Accidents are the **leading cause of preventable death in the under 40s**
- We estimate that around **840,000 people were admitted to hospital** across the UK due to accidents in 2022/3, using up **5.2 million bed days**
- A further **7 million people attended A&E** due to accidents.
- This **costs the NHS at least £6 billion** annually – and likely considerably more, as this excludes the cost of surgery and community services like GPs.

Rate of accidental deaths per 100,000 people, UK, 2013 to 2022

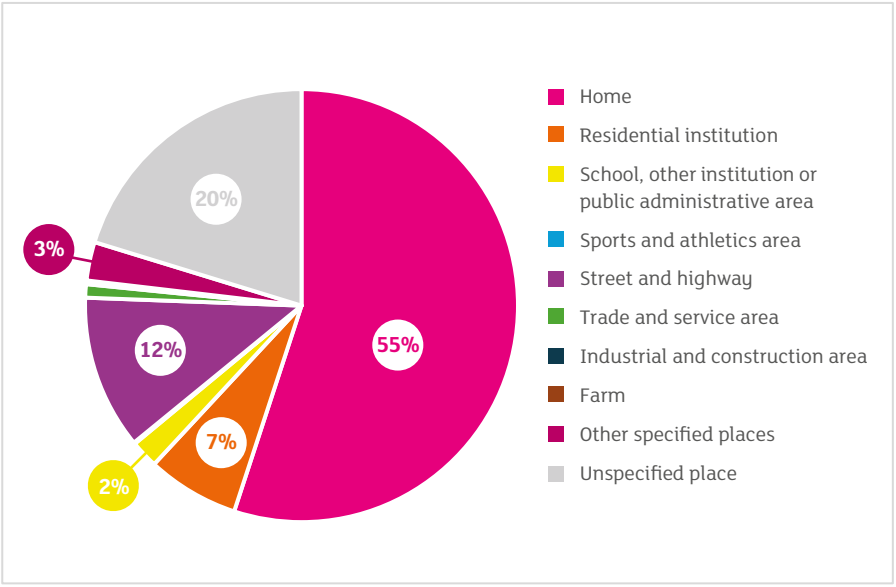
Source: Appendix 1, Table 3.2



These thousands of people who die each year have families, friends and loved ones left devastated by their sudden deaths. Even for those hundreds of thousands who survive these injuries, some will be left with long roads to recovery; they can suffer from disfigurement, disability and mental health problems.

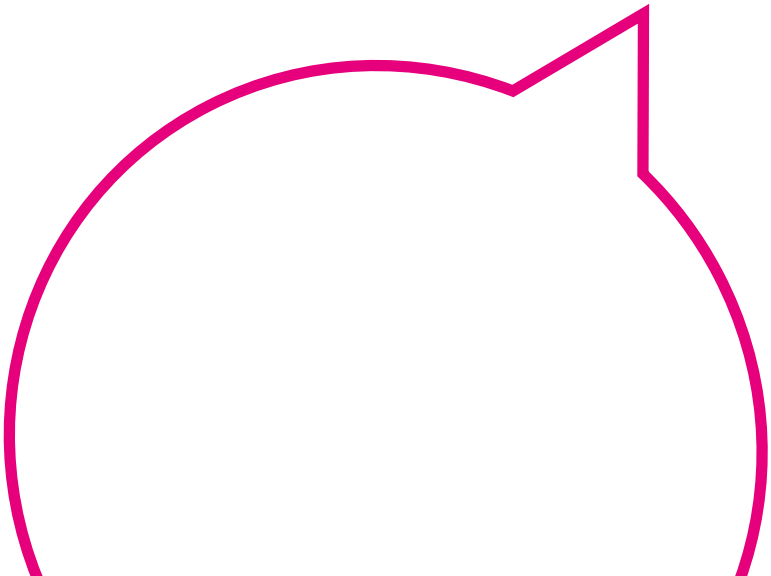
Locations of fatal accidents, England, 2022

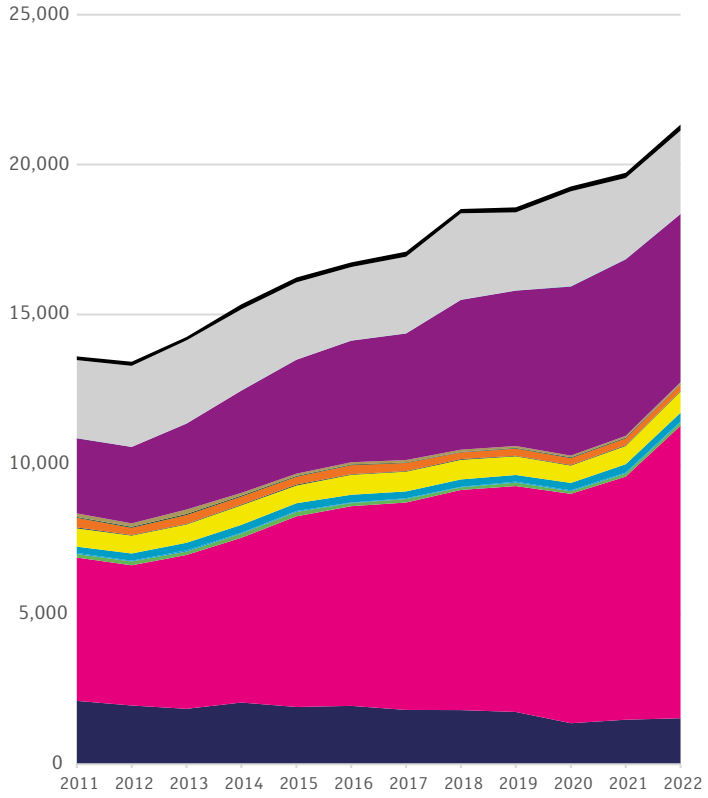
Source: Appendix 1, Table 5.1



Accidents occur in all walks of life:

- We like to think of our **homes** as our sanctuaries, safe places away from the rest of the world. But, in fact, 55% of accidental deaths and 62% of accident-related hospitalisations are due to accidents that occurred in the home
- 561,000 people were **injured at work** in Great Britain in 2022/3, costing individuals, the Government and the wider economy over £7 billion annually
- In 2023, 1,624 people died on British **roads** and a further 28,087 were seriously injured in road collisions. No government today would design a transport network with this number of incidents, so it shouldn't be accepted just because it's the status quo. However, progress is stagnating, as fatalities fell by 9% over the last decade, compared to 47% in the previous ten years
- Countless thousands of unsafe **products** are entering the UK's markets annually, especially through online retailers, putting lives at risk and particularly affecting vulnerable groups like children and people on lower incomes
- The number of deaths caused by **falls** has risen by 90% since 2013; falls make up 61% of all accidental deaths and lead to over 400,000 hospitalisations. Deaths due to **poisonings** are up 96% in the same period
- 236 people **drowned** in the UK last year, and many more are rescued from water annually.





Accidental deaths by type of accident, UK, 2011 to 2022

Source: Appendix 1, Table 2

Accidents affect groups differently, often compounding existing inequalities:

- **Deprivation** increases the likelihood of accidental injury. For instance, in Scotland, death rates due to unintentional injuries were 96% higher than the Scottish average in the most deprived areas, and 50% lower in the least deprived areas. In turn, these outcomes worsen inequalities as people already on lower incomes are more often forced to take more time off work, change jobs or stop working altogether
- Over 50,000 **children** under 10 were admitted to hospital following a non-transport accident in 2022/3, almost half due to falls, while poisonings, chokings, strangulation and other incidents are sadly also major contributors. **61 children died** as a result of accidents in the UK in 2022. There is evidence that accidental injuries are more common among more deprived children and worsen inequalities, for instance by leading them to take more time off school
- **Men** are more likely to be injured or killed in many forms of accident, especially on the road – but **women** suffer more from serious falls
- **Ethnic minority** groups can have a higher likelihood of accidental injury, but data needs to be improved and rates vary between groups and in relation to deprivation
- **Older people** have the highest accidental death and hospitalisation rates, mostly due to having serious falls. **Younger adults** and **middle-aged** people experience high levels of accidental poisoning- and transport-related deaths – and they've experienced the highest growth in the rate of accidental injuries per 100,000 over the last decade
- Accident rates vary between the **four nations**, with Scotland having the highest accidental death rate
- Rates also vary between **regions** and **localities**. In England, the North has a higher accidental death rate than the South, and the provinces have higher accidental death rates than London.

Without intervention, these trends are likely to keep getting worse, and they will also be compounded by emerging **systemic challenges** like **population ageing** and **climate change**.

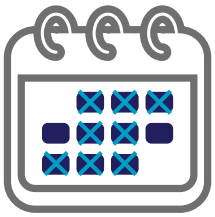
The economic costs of accidents are enormous

In short, accidental injuries are a public health problem of massive proportions, with consequences for society – a problem that is quickly getting worse. This problem is generating enormous, largely unrecognised economic costs to business and the exchequer. Accident-related injuries are a drain on our economy, preventing people from going to work for long periods and forcing people into retirement prematurely.

So many of the new Government's ambitions for the country depend on economic growth which accidents directly choke – they prevent people from working, leaving their home, and being economically active.

Each year accidents cost the UK...

29m
Lost working days



£12 bn
Economic costs

5.2m
Hospital bed days

- Accidents led to **almost 29 million lost working days across the UK** in 2022/3 with 7.7 million for those admitted to hospital and their carers, and 21 million more for people who attended A&E due to accidents.
- This compares to 2.7 million lost working days to strikes in 2023 – meaning **accidents led to over ten times more lost working days than strikes**
- The **combined cost to UK businesses is £5.9 billion** due to lost output and indirect management costs relating to these absences.

This all matters because the new Government has inherited a difficult economic situation, in which public sector borrowing has reached historic highs and has become prohibitively expensive, while the tax burden is the highest it has been since the Second World War. Yet the UK's economy has been growing sluggishly, its workforce stubbornly inactive, its ageing labour force in a perpetual shortage (with a third of UK workers now aged over 50), and its productivity lagging behind our competitors; many thousands of people have not returned to work after Covid, and many never will.

A policy problem: accidents are preventable – but Government must act

At a time when the UK economy faces such an enormous challenge, it is unacceptable that accident rates have been allowed to rise for so long, taking people out of work permanently, driving up demand for the NHS, costing businesses billions, and dragging down growth and productivity.

It is unacceptable because **accidents *don't have to happen***. They are **preventable**. Decades of public health research combined with the many improvements that have occurred in the past show that well-designed, evidence-led interventions reduce accidents. These interventions can include changes to the 'three Es': **education** (including public awareness and training), **enforcement** (including policy, regulation and policing), and **engineering** (by designing in safety), and we can assess and improve interventions by research, monitoring and evaluation. Already, using these principles, accident prevention is going on all around us, all the time, without us even noticing it – but it's clear more needs to be done as the number of serious accidental injuries keep rising.

What's going wrong? In short, this situation has been allowed to emerge because Government has not been keeping on top of this problem. Successive administrations have let progress slip through their fingers, partly because they lack a joined-up plan to deal with it, partly because responsibility for accident prevention is fragmented between many different departments and agencies, without a clear 'owner' to set overall direction. In many areas, this lack of strategic leadership has stifled progress, despite many calls from experts for action – and many novel, proven interventions being demonstrated.

The UK needs a strategic approach

No business facing a problem as large as this would try to address it without a plan. Other countries have realised this and are increasingly adopting world-leading accident prevention strategies, as we have seen in India, Finland and Australia. Where the UK once led the world, others are now leading the way in innovation and embracing a strategic approach to accident prevention across government and society.

In the UK progress is at best stunted and patchy, with improvements in one area often offset by inaction, stagnation or worsening rates in another – ultimately leading to a net rise in accident rates and negative effects on the economy and people's lives. What's lacking is a strategic approach which cuts across departments and agencies and embeds accident prevention within national policymaking at the top level.

That's why we are calling on Government to implement a UK-wide National Accident Prevention Strategy.

We know that Government will be concerned with a range of pressing challenges, but it can achieve tangible results by adopting a joined-up approach to accident-prevention which would reduce the huge human and economic costs of rising accident rates, reduce demand on the NHS and our emergency services, and help to boost growth and productivity.

RoSPA is calling for Government to seize the initiative and create a National Accident Prevention Strategy – a first for the UK. It must:

- Take a **joined-up approach** which cuts across departments and provides strategic leadership to guide policy making at a national level
- **Empower individual departments or agencies** to craft and implement more detailed policies
- Propose ambitious and evidence-led but realistic **policy interventions** to reduce accident rates
- Cover the **core sectors** directly affecting the UK economy: home, work, product, leisure and transport
- Be **forward-facing** to address **emerging challenges**, like the climate crisis, the rise of AI and autonomous technology, the gig economy, and the UK's ageing population
- Address **inequalities** like deprivation, age, ethnicity and region/locality, and recognise different approaches can be required for different groups, like children, older people and minorities
- Take a **four-nations approach** to data sharing and collaboration
- Support **local authorities** to deliver interventions, and listen to **communities** about their local needs
- Understand the **global context**, look for lessons from abroad where appropriate, and help to **export expertise** around the world
- Strengthen Government's **data collection** and publishing processes relating to accidents, to help set **targets** and ensure the strategy is **evidence-led.**

We propose that the National Accident Prevention Strategy be **the specific responsibility of a fixed-term individual minister without portfolio**, ideally as their sole portfolio and with authority to attend the Cabinet and the ability to convene cross-departmental committees. This minister would be responsible for the creation and initial roll out of the strategy after which point the post would be dissolved.

Implementing this strategy would be the first crucial step towards arresting rising accident rates: sustained progress will be impossible without a clear plan. But it is only the first step. Our report is also intended to guide the creation and implementation of a range of other policy interventions which will sit under this strategy and drive change on the ground, as Government works in partnership with agencies, local authorities, practitioners, experts, NGOs and, of course, the public. Government must act today to kick start the change that the public and the economy need.

Note on sources

All facts outlined above are sourced in the body of this report, except for (a) the UK hospital admissions figure, which has been extrapolated from the England figure in the report; (b) the figure around the proportion of working people aged over 50, which is sourced from the Centre for Ageing Better, 'The State of Ageing 2023–24: Work' (retrieved 16 October 2024); and (c) the number of strike days in 2023, which is sourced from ONS, 'LABD: Labour Disputes in the UK', October 2024, Table 1.

CHAPTER

01

A call to action: The UK’s accident crisis

A call to action: The UK's accident crisis

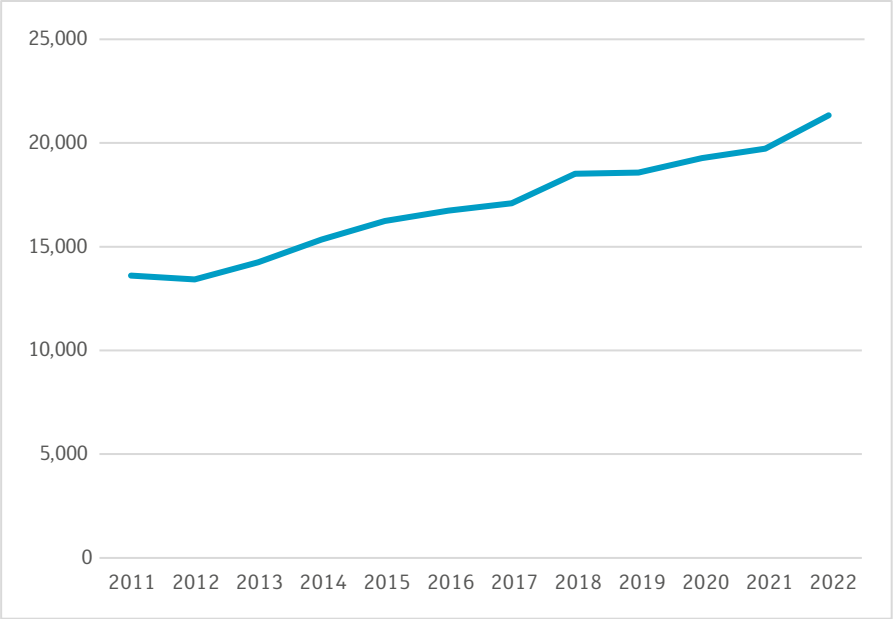
For generations, the United Kingdom has rightly been regarded as the global leader in accident prevention. However, times have changed. Every year in the UK, thousands of people die and are injured as a result of preventable accidents – and the situation is getting worse, with grave consequences not only for victims, but also for businesses, the tax base and public services. This situation has gone mostly unchecked and largely unnoticed within Government for many years. It is showing no signs of reversing on its own. Accidents don't have to happen. They can be prevented – often using proven interventions. In this document we show how, with the right approach, Government can arrest rising accident rates, saving lives, preventing injuries and reducing costs across the economy. The time to act is now.

The figures

Since 2013, **UK accidental deaths have risen by 50%**. 2022 marked the first time in at least 20 years that UK accidental deaths exceeded 20,000; according to official statistics, **21,336 people died due to accidents** in the UK. This is more than the capacity of London's O2 Arena. In fact, over the last decade, 177,085 people have died in the UK due to accidents – the equivalent of the whole population of Rochdale.[1] Strikingly, accidents are the leading cause of preventable death in the under 40s.[2]

Figure 1: UK accidental deaths, 2013 to 2022

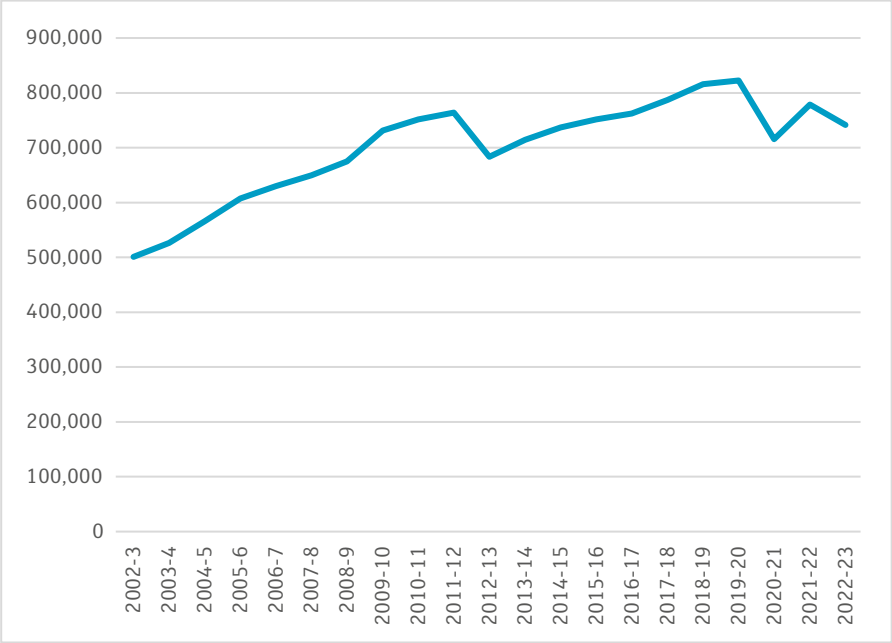
Source: Appendix 1, Table 1



It's not just fatal accidents that are on the rise. In England alone, **accident-related hospital admissions increased by 48%** in the two decades between 2002/3 and 2022/3. This equated to almost a quarter of a million more people being hospitalised due to accidents annually (241,000) in 2022/3 compared to 20 years prior. In all, over 740,000 people were admitted to hospital due to accidents in England alone in 2022/3 – almost the size of the **population of Leeds.**[3]

Figure 2: Accident-related hospital admissions, England, 2002/3 to 2022/3

Source: Appendix 2, Table 1



These changes were not just a product of population growth or of population aging. Over the last decade, the rate of accidental deaths per 100,000 people has gone up by 42%, and has increased for every age group except for people aged 1 to 19; the middle-aged have experienced the greatest increase in accidental death rates. **People have become more likely to die due to an accident.**[4]

Figure 3: Rate of accidental deaths per 100,000 people, UK, 2013 to 2022

Source: Appendix 1, Table 3.2

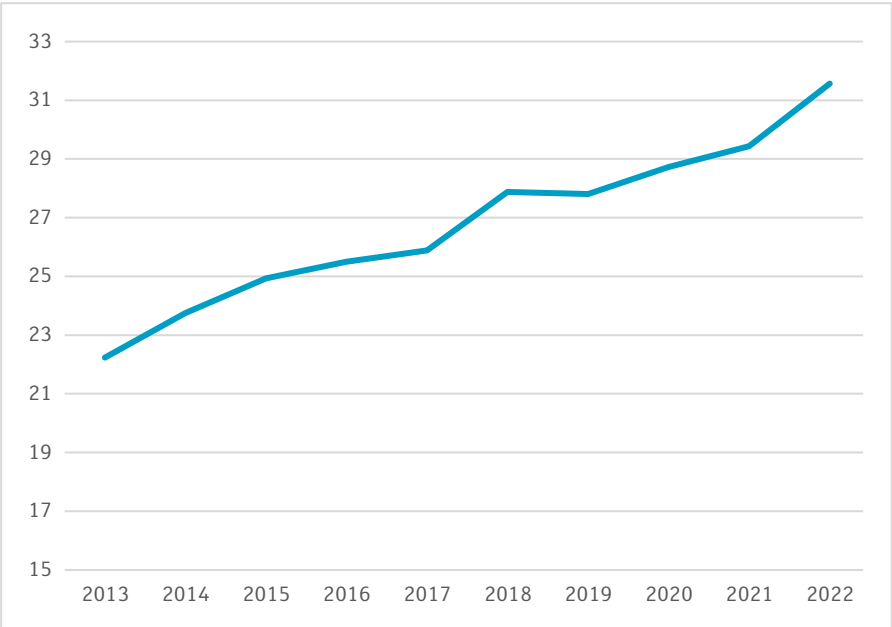
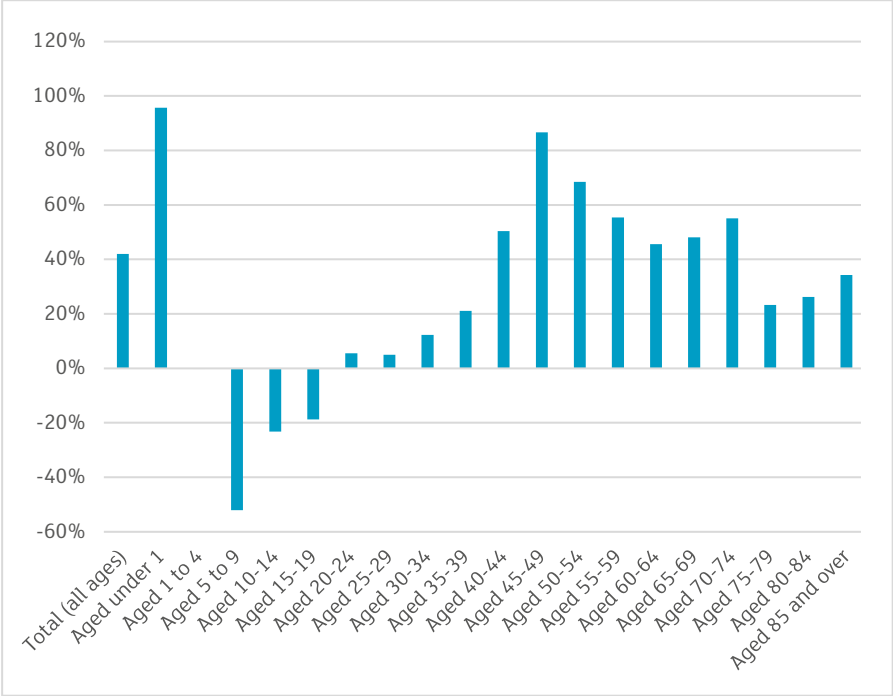


Figure 4: Change in age-specific rate of accidental deaths per 100,000 people, UK, 2013 compared with 2022

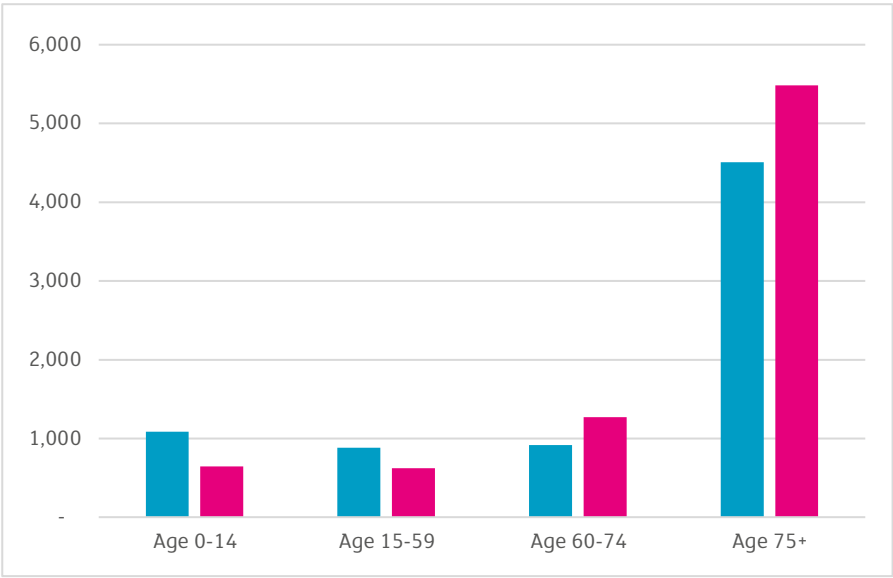
Source: Appendix 1, Table 7.6. Note: There was no change in children aged 1 to 4.



When it comes to hospital data, the overall picture is similar. Since 2002/3, the per capita rate of accident-related hospital admissions in England has increased by 29%.[5] This has been driven mostly by increasing admission rates among older people (75+), among whom the rate has increased by 20%.[6]

Figure 5: Age-specific rate of accident-related hospital admissions per 100,000 people, England, 2002/3 and 2022/3

Source: Appendix 2, Tables 3.5 and 3.8



Overall, we can see that both the number and rate of accidental deaths and serious injuries have risen. Behind these statistical trends are real human stories. Those thousands of people who die annually have had their lives cut short. Their deaths cause immeasurable grief to their families and friends. Even where accidents are not fatal, they can cause pain, injury, time off work or school, and long-term disability or disfigurement. Serious accidents can adversely affect quality of life and can impact mental health as a result, causing issues with post-traumatic stress, anxiety and depression.

Case study

Lesley, 58, retired from public sector management and is now a magistrate. She lives in Tavistock, Devon with husband Scott, 62, a business analyst, and they have three grown up children and four grandchildren. Lesley says:

My first fall happened while staying at my daughter's house. I'd forgotten something downstairs but not wishing to wake anyone, I didn't turn on the light. The grandchildren had left some toys on the steps and as I navigated my way around them, I tripped and fell down the last few stairs. There was no bannister to grip onto so I landed on my side and screamed out in pain.

Scott raced down and panicked a bit. But the adrenaline had kicked in and I felt more embarrassment than pain. I knew my foot hurt but somehow Scott got me back upstairs and with the help of some painkillers I managed some sleep.

Next morning, I woke to find my ankle was swollen and bruised and I couldn't bear any weight. An x-ray at A&E several hours later confirmed it was fractured. I had to wear a plastic boot for eight weeks which was horrendous – not only difficult to walk in but to do everyday things like shower and get into bed. I couldn't do any consultancy work as I couldn't drive which meant that I lost out on several hundred pounds. Plus, I had to buy specialist equipment such as a chair for the shower so I could wash myself.

It took months to heal properly and gain the confidence to walk without a stick. But in the September of the following year, I fell again. This time, we'd moved into a new townhouse with two flights of stairs and I wasn't entirely familiar with the layout. I had nothing on my feet – again – and was nearly at the bottom of one flight when my leg gave way and I fell down several stairs again.

I couldn't believe I'd hurt the same foot. I packed it with ice but went to the minor injuries unit where I was told it was only a sprain. But five days later, the pain was unbearable so I went back for an x-ray and was told that the side of the foot was fractured. I burst into tears. I knew it would mean having the boot on again for another six to eight weeks and all that entailed. It's three years on and my foot has never been 100 per cent right since.

Of course, most accidents are not serious – many are relatively minor. But even still, they can lead to injury, lost days at work, economic cost and inconvenience. It's also often down to luck that a minor accident wasn't more serious – that someone narrowly missed breaking a bone in a fall, noticed a sparking socket in time, or stopped their child tripping, for instance.

Economic costs

Accidents don't just have a personal impact. They come at a huge economic cost too. They put enormous strain on the NHS. In England alone, in 2022/3, **over 4.4m bed days were used up to treat patients with accident-related injuries**, costing the NHS an estimated £4.6bn. Based on these figures, we estimate that accidents led to around 5.2m bed days being used up in the NHS across the UK, costing £5.4bn.[7]

For less severe accidents, we estimate that accidents caused around 7 million A&E attendances across the UK in that year too – costing the NHS at least a further £613m, bringing the **cost of accidents to the NHS to at least £6bn annually.** This does not include ambulance callouts, more complex A&E visits, surgery and long-term or out of hospital treatment.[8]

The wider economic effects are enormous. We estimate that accidents led to almost 29 million lost working days across the UK in 2022/3: 7.7 million for those admitted to hospital and their carers, and 21 million more for people who attended A&E due to accidents. The **combined cost to UK businesses is a minimum of £5.9bn**, due to lost output and indirect management costs.[9]

Each year accidents cost the UK...

It is clear that some victims of serious accidents will never return to work – though, staggeringly, there is no official data on how many people exit the workforce each year due to accidental injuries.[10]

Taken together, these costs to the NHS and these costs to business amount to around **£12bn a year at least – which is 0.5% of the UK's nominal GDP**, or the equivalent of most of the foreign aid budget. There are a large number of additional costs too which we have not estimated here, including recurring healthcare costs where long-term treatment is needed, home adaptations, and the effects of missed school when children get injured.[11]

This all matters because the new Government has inherited a difficult economic situation, in which public sector borrowing has reached historic highs and has become prohibitively expensive, while the tax burden is the highest it has been since the Second World War. In the face of this, the new Chancellor of the Exchequer has made clear that there is a need for strong discipline in public finances, with limited room for additional spending. Yet, public services are under great strain. The NHS's performance problems are well-known: waiting lists are too long, resources under immense pressure, budgets at historic highs.[12] One solution is to grow the economy to generate more revenue, but the UK's economy has been growing sluggishly, parts of its workforce are stubbornly inactive, its ageing labour force in a perpetual shortage, and its productivity lagging behind our competitors; many thousands of people have not returned to work after Covid, and many never will.

At a time when the UK economy faces such an enormous challenge, it is unacceptable that accident rates have been allowed to rise for so long, taking people out of work permanently, driving up demand for the NHS, costing businesses billions, and dragging down growth and productivity.

Accidents and public policy

It is unacceptable because accidents *don't have to happen*. They are **preventable**. Throughout the twentieth century, the UK was one of the leading countries in the world for innovating in health and safety at work, in the home, at play and on our roads. We have pioneered countless measures, ranging from the world-leading Health and Safety at Work etc Act 1974, through to mandatory seatbelt wearing and breathalyser rules. These have seen, for instance, accidents at work fall sharply over the last century and many life-saving measures introduced which we now see as normal. As a result, accident prevention is all around us, quietly saving lives and keeping people safe. So much of it we take for granted. Yet, as recent trends show, we have become complacent. Whilst there are new challenges, in reality most accidents today are old ones affecting new people. For some of these accidents, we already know how to prevent them (and have done for some time), yet there has been a lack of initiative on the part of Government when it comes to properly implementing preventative measures.

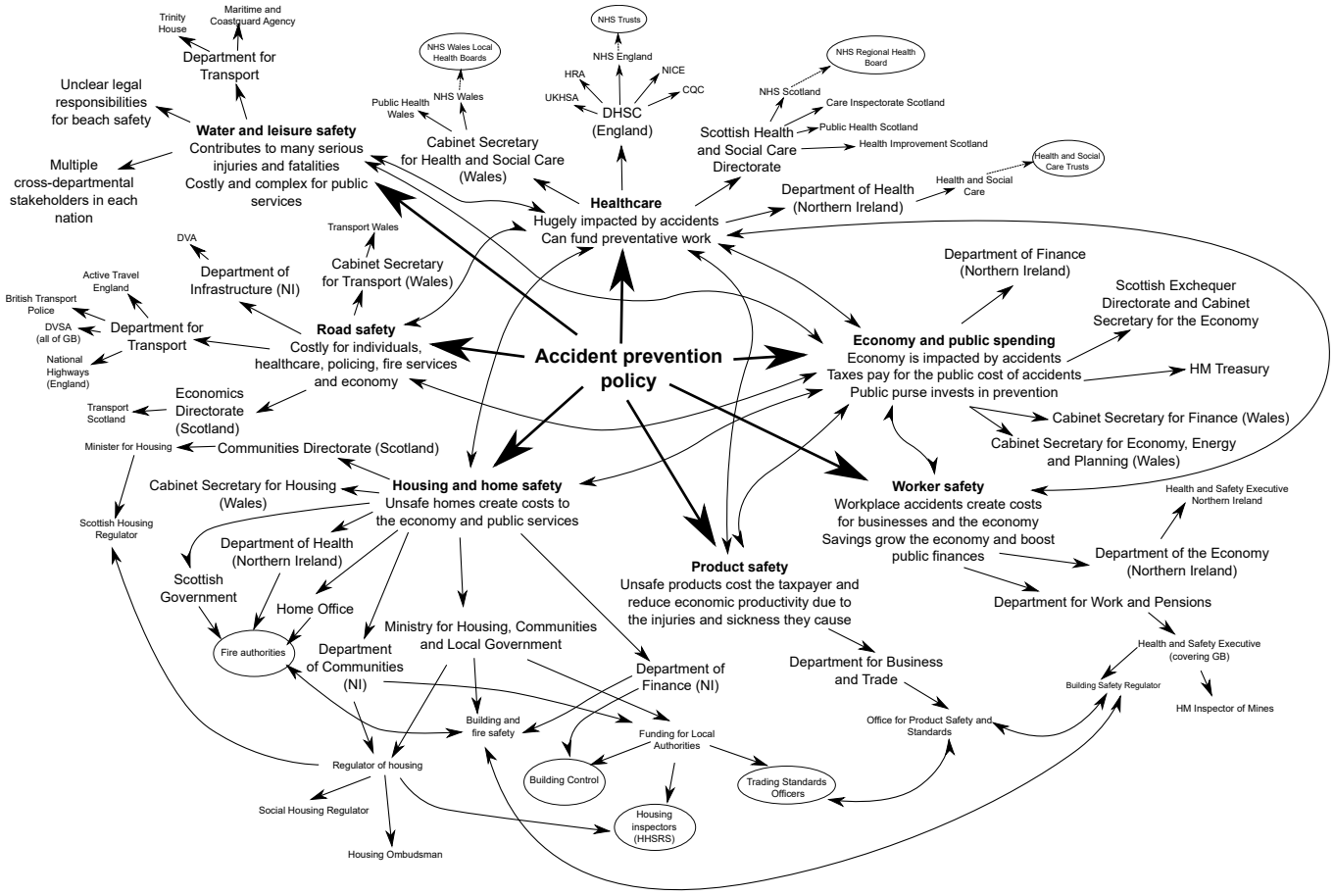
This is not only causing the human and economic consequences outlined above; it's also allowing other countries to take what was once a hard-fought lead. We used to be an innovator in injury prevention, with our workplace safety regime widely emulated, for instance.[13] It was an example of the UK not only leading the way, but exporting its expertise and projecting its soft power around the world. Now, the UK is losing its lead in many areas. For instance, the UK had the seventh-worst progress in reducing road deaths out of the EU27 in the decade 2013 to 2023.[14] The Grenfell Tower fire and the subsequent public inquiry have exposed numerous regulatory weaknesses in building and fire safety.[15] As we have already seen, our rates of accidental death and serious injury are rising sharply.

What's going wrong? In short, this situation has been allowed to emerge because the Government has not been keeping on top of this problem. New issues have emerged, old ones have persisted. Successive Governments have let progress slip through their fingers.

One of the key challenges is that no single department can manage accident prevention. The effects of accidents are most acutely felt in the NHS, but the Department for Health and Social Care (DHSC) has little scope to deal with the causes. For instance, safety on the roads is owned by the Department for Transport (DfT), safety at home is split between the Ministry for Housing, Communities and Local Government (MHCLG; for building standards) and the Department for Business and Trade (DBT; for product safety). Occupational health and safety rules are set by the Department for Work and Pensions (DWP). Drowning prevention can sit with DfT but also with the Department for the Environment, Food and Rural Affairs (DEFRA), which manages our national parks. Numerous agencies have individual remits to prevent accidents or deal with their aftermath – from HM Coastguard to the police forces, from the Office for Product Safety and Standards to the Health and Safety Executive, and from Building Control to local authority trading standards officers.

Accident prevention is dispersed across a wide range of departments and agencies, creating the complex and fragmented policy landscape shown in Figure 6.

Figure 6: An overview of some of the Government departments and agencies responsible for accident prevention



So, while safety in UK business benefits massively from a robust regulatory environment enforced by HSE and cohesively owned by a single department (the DWP), the same cannot be said for other spheres of life. And this is a problem because the majority of accidents actually happen at home, in the public realm or travelling to and from work – where standards are different, and the issue falls between these different departments and agencies. However, these accidents outside of work impact the economy enormously because they are major contributors to accident-related workplace absences and productivity issues.[16]

This situation has emerged because no Government has prioritised this issue. It tends to get overlooked and single high-profile issues are treated individually rather than understood to be part of a whole-system approach. As a result, progress is stunted and patchy, with improvements in one area often offset by inaction, stagnation or worsening rates in another. The net result has been rising accident rates over recent decades, with the concomitant effects on the economy and people's lives. What's lacking is a strategic, joined up approach which cuts across departments and agencies and embeds accident prevention within national policymaking at the top level.

We recognise that the new Government will be concerned with a range of pressing challenges – and we know that there are no 'magic bullets' to solve them. But Government can achieve tangible results by adopting a national, cross-sector accident-prevention strategy to reduce the huge human and economic costs of rising accident rates, and reduce demand on the NHS and our emergency services. Indeed, taking strategic action on accident reduction will be essential to grow the economy, protect the NHS and keep people in work for longer.

Key recommendation

RoSPA is calling for Government to seize the initiative and create a National Accident Prevention Strategy – a first for the UK. It must:

- Take a **joined-up approach** which cuts across departments and provides strategic leadership to guide policy making at a national level.
- **Empower individual departments or agencies** to craft and implement more detailed policies.
- Propose ambitious but evidence-led and realistic **policy interventions** to reduce accident rates.
- Understand that accident prevention is a **public health problem** to be addressed using evidence-led interventions involving a combination of **education** (including public awareness and training), **enforcement** (including policy, regulation and policing), and **engineering** (by designing in safety)
- Cover the **core sectors** directly affecting the UK economy: home, work, product, leisure and transport.
- Be forward-facing to address **emerging challenges**, like the climate crisis, the rise of AI and autonomous technology, the gig economy, and the UK's ageing population.
- Address **inequalities** like deprivation, gender, age, ethnicity and region/locality
- Take a **four-nations approach** to data sharing and collaboration.
- **Support local authorities** to deliver interventions, and listen to **communities** about their local needs
- Understand the **global context**, look for lessons from abroad where appropriate, and help to **export expertise** around the world
- Strengthen Government's **data collection** and publishing processes relating to accidents, to help set targets and ensure the strategy uses **evidence to guide decision-making.**

We propose that the National Accident Prevention Strategy be **the specific responsibility of an individual minister without portfolio, ideally as their sole portfolio** and with authority to attend the Cabinet and the ability to convene cross-departmental committees, meetings or working groups to ensure that accident prevention is treated holistically. Because, it's impossible to arrest a crisis like this without a plan. Any business faced with a problem on the scale of the UK Government's accident crisis would immediately move to appoint such a strategic lead.

It is far better to treat the UK's accident malaise at source, rather than spending more and more money on treating the growing number of symptoms. Dealing with the root issue is far more likely to help grow the economy too. As the current Government said in its manifesto, **'prevention will always be better, and cheaper, than a cure'**. This could not apply to any sector better than it applies to accident prevention.

Structure of the report

The rest of this report outlines the scale of the problem facing the UK and what the National Accident Prevention Strategy needs to contain in detail. We start from first principles in Chapter 2, which looks at definitions and key concepts, before turning to examine overarching trends in accident rates in Chapter 3. A National Accident Prevention Strategy must recognise that accidents happen differently in different spheres of our lives; the issues and changes required in five core sectors – work, road, home, product and leisure – are outlined in Chapters 4 to 8, which also include a spotlight on child safety.

A strategy is useless if it is not alert to emerging challenges. Chapter 9 outlines several major issues that are coming down the road and will have important implications for accident prevention in the near future, including climate change, AI, driverless vehicles, and the UK's aging population.

Chapter 10 argues for an inclusive strategy which accounts for the intersecting health inequalities driving differential accident rates. Chapter 11 advocates for a four-nations approach, which recognises differences between nations while encouraging data sharing and consistency of reporting, while Chapter 12 argues for empowering local authorities. Chapter 13 places the UK against a global context and suggests how it can be world-leading. Finally, Chapter 14 concludes the report by stating the need for any strategy to be data-led. It outlines steps for filling gaps and improving our data, allowing us to plan, monitor change and measure success.

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[1] Throughout this report, we use data on accidental deaths derived from the Office for National Statistics, National Records of Scotland and the Northern Ireland Statistics and Research Agency. Data tables and detailed notes on sourcing can be found in Appendix 1 and further information is in Chapter 2. For the data cited here, see Appendix 1, Table 1.

[2] Appendix 1, Tables 8.1 and 8.2.

[3] Appendix 2, Table 1.

[4] Appendix 1, Tables 3.2 and 7.6.

[5] Appendix 2, Table 2.

[6] Appendix 2, Tables 3.5 and 3.8

[7] Appendix 3, Part 1.

[8] Appendix 3, Part 3.

[9] Appendix 3, Parts 2 and 4.

[10] We make recommendations around data collection in Chapter 14.

[11] According to the World Bank, the UK's GDP was worth $3.34tn in 2023, or £2.51tn. £12bn is 0.5% of this. State foreign aid spending was £15bn in 2023. Sources: World Bank, 'GDP: Current US Dollars: United Kingdom' (retrieved 20 September 2024); Foreign, Commonwealth and Development Office, 'Statistics on International Development: Provisional UK Aid Spend 2023', 10 April 2024.

[12] See Lord Darzi, *Independent Investigation into the NHS* (2024).

[13] Jukka Takala, 'The Magna Carta of Health and Safety at Work', in *Safety Management* (July 2014), special ed. ('The Act That Changed Our Working Lives'), pp. 17–18.

[14] European Transport Safety Council, 'Relative Change in Road Deaths (%), 2022–2023; 2019–2023; 2013–2023' (retrieved 26 September 2024).

[15] See Chapter 6.

[16] Most serious accidents occur outside of work – either at home or on the road. See, for instance, Chapter 6.

CHAPTER 02

Definitions and principles

Definitions and principles

What is an accident?

In 1956, the World Health Organisation (WHO) defined an accident as an 'unpremeditated event resulting in recognisable damage'.[1] This definition broadly aligns with the one used by the UK's Health and Safety Executive (HSE), which specifies that an accident 'is a type of incident which is separate, identifiable, unintended and causes physical injury'.[2]

Broadly, both definitions capture the essence of an accident: it is (a) a discrete event/incident, which (b) causes injury or damage, and (c) occurs unintentionally. An assault, for instance, cannot be an accident because, although it is an event and caused injury, there is intention on the part of the attacker; likewise, a drug overdose would only be an accident if the patient did not intend to overdose. This is the definition we use throughout this document and we propose that the National Accident Prevention Strategy (NAPS) adopt a definition along these lines too.

Counting accidents

For statistical purposes, the WHO have embedded these core principles into the International Classification of Diseases (ICD), a coding framework which assigns diagnostic codes for diseases, symptoms, findings, circumstances and external causes of injury or disease (including accidents). The latest version of the ICD is ICD-11, which was introduced in 2022, but it has not yet been widely adopted. ICD-10, introduced in 1994, has been used in the UK for statistical purposes since the early 2000s. It is widely used globally and in the UK, including by the UK's national statistics agencies and the NHS to report on causes of death and hospitalisation. ICD-10 codes accidents in the ranges V01 to X59 and Y85 to Y86 (both within Chapter XX: 'External causes of morbidity and mortality').[3] The ICD-10 system categorises accidents as follows:

- Transport accidents
  - Pedestrian injured in transport accident (V00-V09)
  - Pedal cyclist injured in transport accident (V10-V19)
  - Motorcycle rider injured in transport accident (V20-V29)
  - Occupant of three-wheeled motor vehicle injured in transport accident (V30-V39)
  - Car occupant injured in transport accident (V40-V49)
  - Occupant of pick-up truck or van injured in transport accident (V50-V59)
  - Occupant of heavy transport vehicle injured in transport accident (V60-V69)
  - Bus occupant injured in transport accident (V70-V79)
  - Other land transport accidents (V80-V89)
  - Water transport accidents (V90-V94)
  - Air and space transport accidents (V95-V97)
  - Other and unspecified transport accidents (V98-V99)

- Other external causes of accidental injury
  - Falls (W00-W19)
  - Exposure to inanimate mechanical forces (W20-W49)
  - Exposure to animate mechanical forces (W50-W64)
  - Accidental drowning and submersion (W65-W74)
  - Other accidental threats to breathing (W75-W84)
  - Exposure to electric current, radiation and extreme ambient air temperature or pressure (W85-W99)
  - Exposure to smoke, fire and flames (X00-X09)
  - Contact with heat and hot substances (X10-X19)
  - Contact with venomous animals and plants (X20-X29)
  - Exposure to forces of nature (X30-X39)
  - Accidental poisoning by and exposure to noxious substances (X40-X49)
  - Overexertion, travel and privation (X50-X57)
  - Accidental exposure to other and unspecified factors (X58-X59)
- Sequelae of accidents (Y85-Y86)

For the purposes of this document, when we report figures for accidental deaths or hospital admissions as a whole, we are referring to the events coded with the ranges described above (V01-X59, Y85-Y86). When we refer to deaths or hospitalisations caused by a category of accidents, such as falls, we will use the codes listed above (or an individual code within these categories), except for road transport collisions, where it is industry standard to use the separately coded Stats19 database produced by the Department for Transport. Because the ICD codes are globally recognised, widely understood and used in official statistics in the UK's national statistics agencies and the NHS, we recommend that they are embedded in this way in NAPS too. We make further recommendations around data recording in Chapter 14.

The injury pyramid

Accidents can cause injuries and disease. Injuries are 'physical damage due to the transfer of energy'.[4] We can think of these injuries in terms of severity, on a spectrum from those which are fatal to those which are very minor; many accidents will cause no injuries or be near-misses.[5] This is often depicted as a pyramid or triangle, which recognises the tendency for the number of instances within each category to decrease with their severity.[6]

Figure 7: The injury pyramid

For the purposes of this document, we mostly focus on accidental deaths and on injuries serious enough to warrant hospitalisation. This is partly because the data for these types of accidents are generally very good, and because reducing these figures is our priority and should be the priority of NAPS.

More minor (but often still quite serious) accidents are still an enormous problem. Those where the patient attended A&E but was not admitted to hospital, for instance, can range from minor cuts and bruises to concussions and broken bones; there is very limited data on this, because published injury data for A&E does not account for intent or cause. However, in the previous chapter we highlighted the estimated scale of these less serious injuries and their enormous cost to the UK economy. We recommend that NAPS also takes account of these more 'minor' injuries and prioritises the better recording of accident data in A&E situation reports (see Chapter 14 for more detail).

The least serious injuries and near misses are also important, because, as HSE states,

a pattern of near misses provides an early warning that something needs attention. Near misses may seem trivial but they are a valuable source of information. Taking time to review the underlying causes is likely to reduce risk, improve health and safety, and save you time and money.[7]

From more than 30 years of running the world's leading workplace health and safety awards programme, RoSPA knows the importance of early warning. Employers counting 'near-miss' incidents has been crucial to the major gains made in workplace safety. NAPS must take account of all of these accidents and improve data collection and reporting on minor injuries and near-misses in the general population to better understand the scale of the problem and guide longer-term prevention measures.

What is accident prevention?

We've all heard the saying that 'prevention is better than cure', but what is prevention? How does it work?

We can think about prevention as a set of activities that are meant to 'reduce risks or threats to health'. These can be called **'interventions'.**[8]

Although we often think of prevention as removing the root causes of something, in public health it takes on a broader meaning.[9] Removing the root cause is, of course, a type of prevention – and we call it **'primary prevention'**. In road safety, driver training is a form of primary prevention; in product safety, banning the sale of something known to be dangerous is also a type of primary prevention.

Other types of prevention exist. **Secondary prevention** is about reducing the effects of an accident *as it is happening*; in road safety, this includes seat belts; in work safety, it can include protective equipment. These things intervene to reduce the severity of an accident.

Finally, **tertiary prevention** involves dealing with an accident *after* it has happened by minimising the long-term impacts of the accident. For instance, it might involve emergency medical treatment to injured parties in a car crash. It is still about reducing the effects of the accident to injured parties, so is a type of prevention – but it is not about preventing the accident itself.

All three of these types of prevention are important, but, of course, reducing the risk of the accident occurring in the first place will ultimately reduce the cost of secondary and, especially, tertiary interventions.

In practice, accident prevention is happening around us all the time, so much so that we often don't notice it. Look around your home and you'll see countless instances of prevention – the pre-wired plugs, the standard marks on your lightbulbs, the smoke alarm in your kitchen, the handrails on your stairs, and the fire-resistant foam in your furnishings. Replicated millions of times around the country, these and myriad other interventions are constantly saving lives, quietly and invisibly. So prevention isn't new or strange; it's everywhere, all the time.

However, as we show in the following chapters, that's no reason to be complacent: as rising accident rates show, there is much more we need to do. So what makes good prevention? How do we build on what we have?

The public health model of injury prevention

Good accident prevention interventions aren't imagined up randomly. They are, and should be, thought through and approached through systematic, scientific investigations into how accidents occur and what can reduce them.

The public health model of injury prevention guides this. According to the International Labour Organization (ILO), 'a public health approach to … injury prevention is based on the assumption that injury is a health problem, and as such can either be prevented or its consequences mitigated'.[10] Injuries are diseases caused by exposure to some external energy – whether kinetic from a fall, for instance – or, as the ILO put it, a 'rapid departure from the body's structural and functional norm', as in drowning or poisoning.[11]

Public health practices, based on epidemiology, are focused on investigation, research and evaluation. In scientific terms, we can think of these as a sequence involving: **surveillance** (the collection and analysis of data), **aetiological research** (which tests hypotheses about causes), **the interventions**, and **evaluation**, which assesses how effective those interventions are. We can think of these steps not as linear, but cyclical, as evaluation is followed by further surveillance, further interventions, and further evaluation, repeatedly, with the aim that accidents are continually being reduced. In many cases, bringing in community support and care is also integral to effectively delivering public health outcomes.[12]

The core strategies for intervention should include:[13]

- Using assessment and evaluation to guide prevention;
- Giving importance to **passive protection** which happens without human activity and therefore minimises the role of human error or behaviour (contrasting with **active protection**, which requires human intervention);
- Behaviour modification;
- Options that can reduce severity of injuries, not just accident occurrence; and
- Public buy-in: the involvement of communities, businesses and people.

The 'three Es' – education, engineering and enforcement

When it comes to designing interventions, the 'three Es' offer another guiding principle in accident prevention. These are education, engineering[14] and enforcement:

- **Education:** this is about providing information to people, ideally to support them modifying their behaviour and understanding risks. This might include, for instance, driving lessons or training on how to use machinery safely.
- **Engineering:** this focuses on how changing something physically can reduce accident risk. We can think of this as 'designing in' safety. Examples include building stairs with handrails, putting safety caps on medicine, and adding guards and automatic shut offs on machines.
- **Enforcement:** this is about making changes to the law and making sure that people comply with these laws; it includes policy changes, new standards and safety inspections.

Some have argued for a fourth 'E', equity, because, as we shall see in Chapter 10, accident rates are not even among people, but occur differently in different groups; interventions need to recognise these differentials.[15]

These aspects need to be seen as working together; focusing on one type of intervention will probably not be effective, so a joined-up approach which addresses behaviour, design, and regulation and enforcement is often the best way to make change.

Safe Systems Approach

Finally, some fields in accident prevention, especially road safety, advocate for what is called a 'safe systems approach'. This is based on several tenets: that accidents don't have to happen; humans are fallible and are vulnerable; that government, industry, NGOs and the public have a stake in safety; that safety should be 'proactive'; and that we need to build in redundancy, so that if one part of the system fails, the others can still work to reduce accidents.[16]

Summary

All of these approaches to accident prevention capture different aspects of the task. We can think of the public health model as a guide for developing interventions; the three Es as types of intervention; the classification into primary, secondary and tertiary as a way of conceptualising approaches to prevention; and the safe system approach as a reminder that humans err and that we should build in room for mistakes in our interventions and collectively take responsibility for reducing accidents, because we share the public realm and therefore have a duty to make it safer.

These guiding principles and concepts must be embedded in NAPS and are used throughout this document to inform proposed interventions.

[1] Sanjeev Pratap, 'Injury Prevention', in Suresh David and Anthony Brown (eds), *Textbook of Emergency Medicine* (New Delhi, 2012), vol. 1, p. 2254.

[2] Health and Safety Executive, 'RIDDOR Explained' (retrieved 20 September 2024).

[3] World Health Organization [WHO], 'ICD-10 Version:2010' (retrieved 20 September 2024).

[4] 'Principles of Prevention: The Public Health Approach to Reducing Injuries in the Workplace', in *Encyclopaedia of Occupational Health & Safety* (Geneva, 2011, rev. 2022).

[5] There are various scales used to determine these, e.g. the Abbreviated Injury Score and the Injury Severity Scale.

[6] In the mid-1990s, HSE found that for every 1 fatality, there were 207 major injuries, 1,402 moderately serious injuries, and 2,754 minor injuries: Health and Safety Executive (1999). *The Cost to Britain of Workplace Accidents and Work-Related Ill Health in 1995/96* (London), p. 32.

[7] Health and Safety Executive, 'Near-Miss Book: Recording and Reporting Near Misses at Work', February 2021.

[8] Institute for Work and Health, 'Primary, Secondary and Tertiary Prevention', April 2015.

[9] I am grateful for Roger Bibbings, MBE, CFIOSH, for his reflections on the three types of prevention and for some of the examples used here; any errors are, of course, my own.

[10] 'Principles of Prevention: The Public Health Approach to Reducing Injuries in the Workplace', in *Encyclopaedia of Occupational Health & Safety* (Geneva, 2011, rev. 2022).

[11] *Ibid.*

[12] *Ibid.*

[13] *Ibid.*

[14] Sometimes called 'environment'.

[15] Audrey Giles, Michelle E. E. Bauer and Janet Jull, 'Equity as the Fourth "E" in the "3 E's" Approach to Injury Prevention', *Injury Prevention*, vol. 26 (2020), pp. 82-84.

[16] US Department of Transportation, 'What Is a Safe System Approach?' (13 October 2022); RoSPA, 'Safe System' (retrieved 20 September 2024).

CHAPTER

03

UK accidents: an overview

UK accidents: an overview

Accidents are a broad category of incidents. The purpose of this chapter is to provide an overview of accident rates in the UK, holistically and broken down into accident type. It is an attempt to provide a 'state of the nation' look at where we are today in terms of accident rates, and lays some key foundations for the rest of this report, which will then focus on individual sectors and suggest policy interventions. If there is one message to take away from this chapter, it is that serious accident rates in the UK are almost all going in the wrong direction. They're getting worse, not better. This is true overall and is true for most types of accident – from falls to poisonings.

If these types of numbers were showing in any other area of public health, the intervention in response would almost certainly be huge: it would probably be a scandal. Because accidents are not monitored or prioritised to the same extent as other health issues, data collection is fragmented between nations (see Chapter 14), and accidents are wrongly seen as inevitable (they are in fact preventable), these trends have largely been overlooked in the media and public discourse (outside of a small number of experts and NGOs). We are bringing together this data to make this information more accessible than ever before, and impress clearly on the public, politicians and the press how serious this issue is.

Headline figures[1]

- **21,336 people died of accidents in the UK in 2022**, the latest year for which data is available at the time of writing: 16,765 in England, 688 in Northern Ireland, 2,677 in Scotland, and 1,206 in Wales.[2]
- The **per capita rate of accidental deaths has increased by 42%** since 2013.[3]
- There were **741,755 hospital admissions related to accidents in England in 2022/23**.[4]
- Hospital admissions data is not available in comparable formats for Scotland and Northern Ireland, but, assuming a similar rate as in England, we estimate that there were over **870,000 accident-related admissions in the whole of the UK**.[5]
- The **per capita rate of accident-related hospital admissions** in England has increased by 29% since 2002/3[6]
- In 2019/20,[7] we estimate that the total number of A&E attendances for accident-related injuries was 6,020,850 (27% of all attendances). Adjusting for the whole of the UK gives an estimate of **7,126,961 accident-related A&E attendances.**[8]

Figure 8: Rate of accidental deaths per 100,000 people, UK, 2013 to 2022

Source: Appendix 1, Table 3

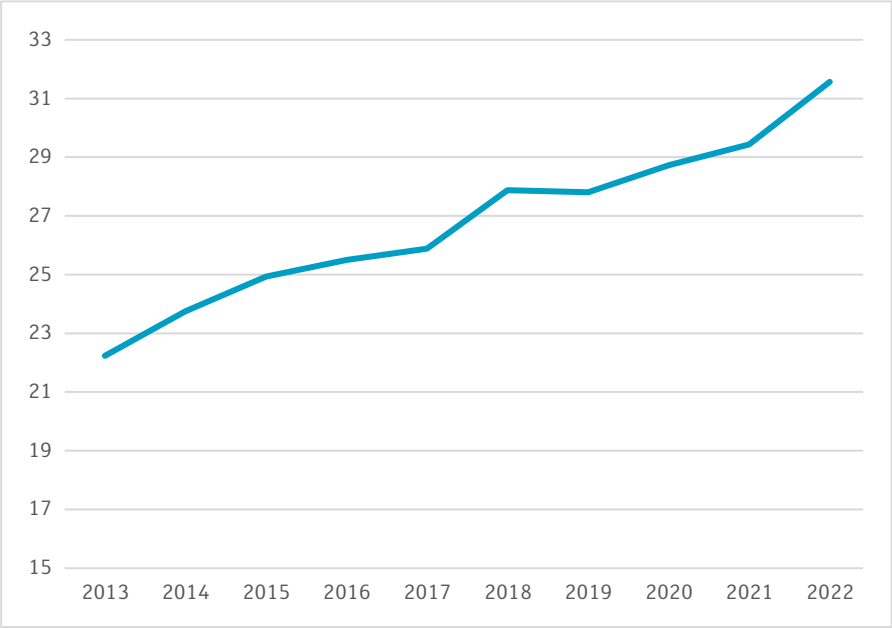
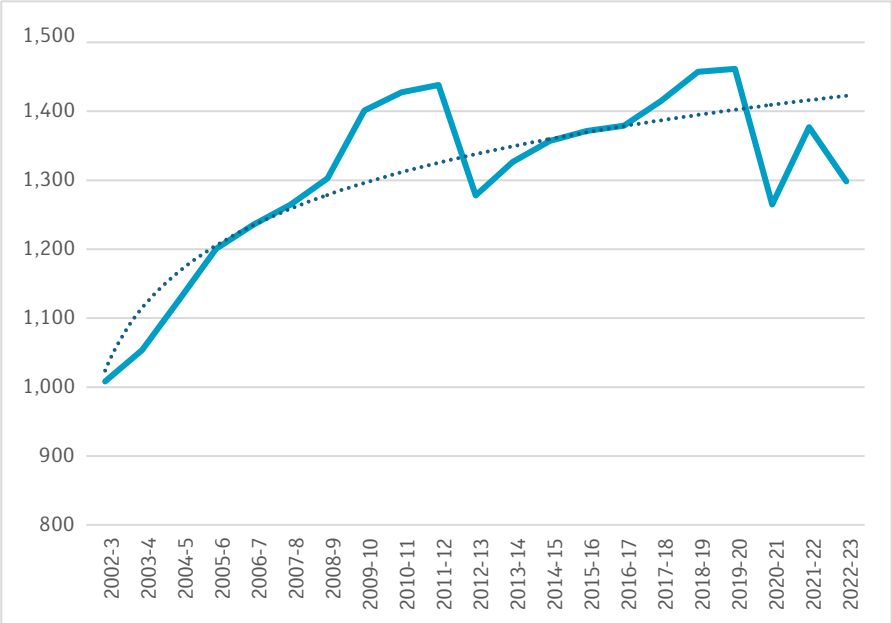


Figure 9: Rate of accident-related hospital admissions per 100,000 people, England, 2002/3 to 2022/3

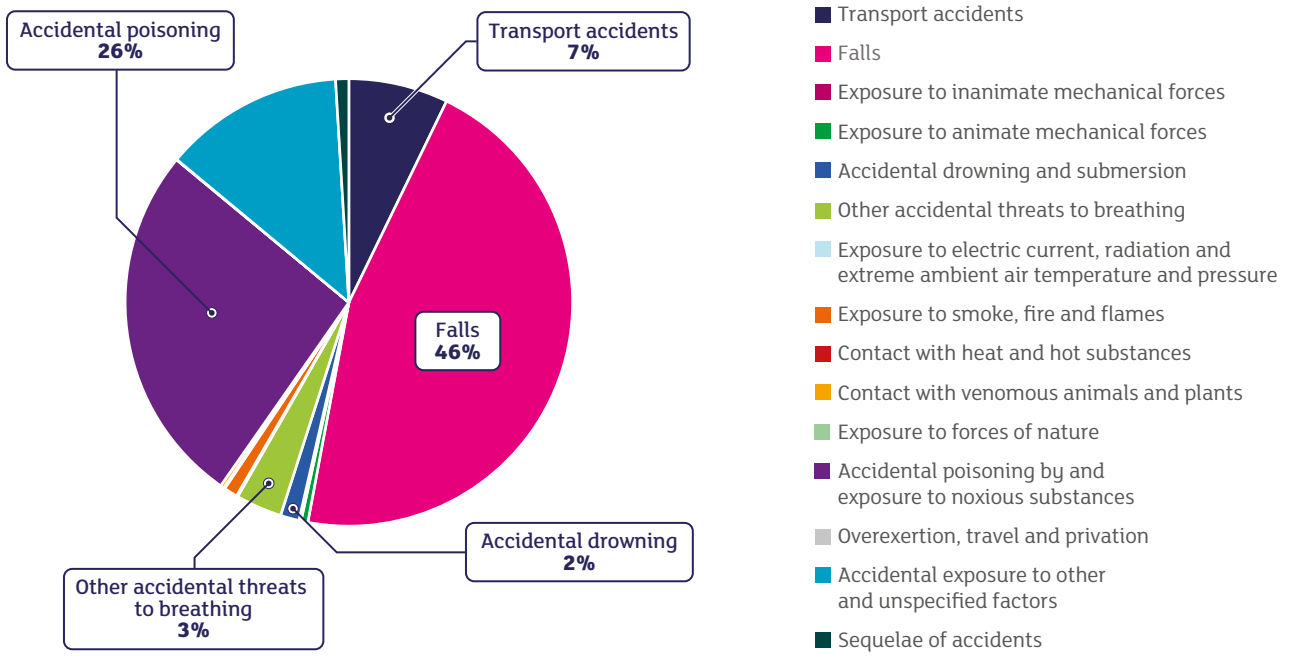
Source: Appendix 2, Table 2.2



Accident profiles

Figure 10: Underlying causes of death (accidents), UK, 2022

Source: Appendix 1, Table 2



What type of accidents lead to serious injury or death in the UK? RoSPA has collated cause of death data from all four nations for the first time.[9] These show that in 2022, 46% of accidental deaths – 9,759 – resulted from falls. A further 26% were caused by accidental poisonings, 7% were due to transport accidents,[10] 1% by drownings and 3% by 'other accidental threats to breathing' including choking and suffocating. Collectively, these causes accounted for 83% of accidental deaths. A further 13% were placed in the category 'other and unspecified', leaving 3% of the total spread between the 8 other categories.

When we look at accident-related hospital admissions (available for England only), a somewhat different picture emerges. Falls still account for the overwhelming majority of admissions, though at a higher rate (61% – almost 450,000 instances), while transport accidents were implicated in 7% of accident-related admissions.

However, other types of accident are more prevalent in hospital admissions than in deaths, implying that they have the potential to cause serious injury but are much less likely to be fatal. This includes accidents classed as 'exposure to inanimate mechanical forces', which includes crushing, striking, firearms accidents, and contact with machinery, sharp objects, and explosions; this category accounted for 12% of admissions – over 84,000 cases – but just 105 deaths (0.5%). 'Exposure to animate mechanical forces', including accidental

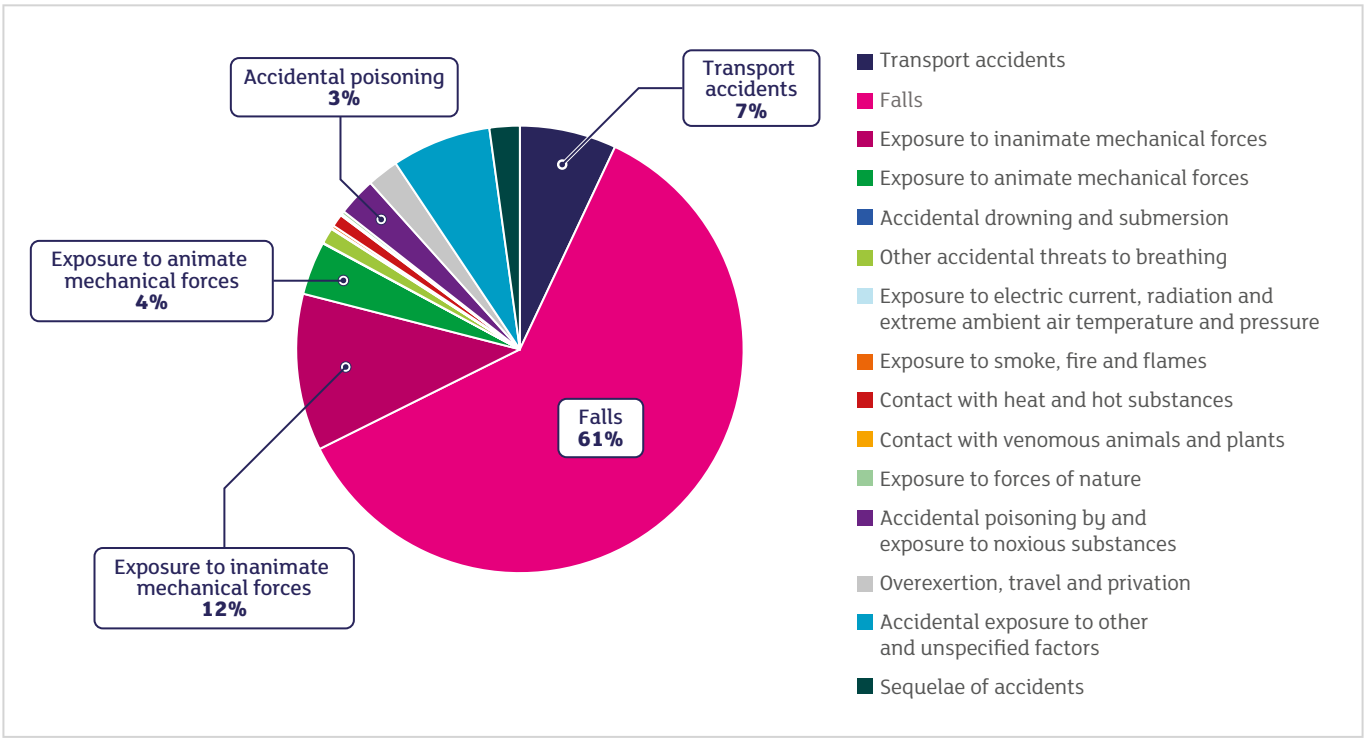
injuries caused by animals and other people, represented 4% of the accident-related admissions (28,584), but just 33 deaths (0.2%). This is also true of admissions for 'overexertion, travel and privation', which comprised 2% of admissions (16,852), but only 7 deaths (0.03%).

By contrast, accidental poisonings are among the most prevalent causes of accidental death, but account for a much smaller proportion of accident-related admissions (3%; 20,596), suggesting that although they are less common in the population, they are especially dangerous and have high risk of death.

These cases highlight how reducing hospital admissions and fatalities can require approaches targeted to each tier of the 'injury pyramid'.

Figure 11: Accident-related hospital admissions by type of accident, England, 2022/23

Source: Appendix 2, Table 1



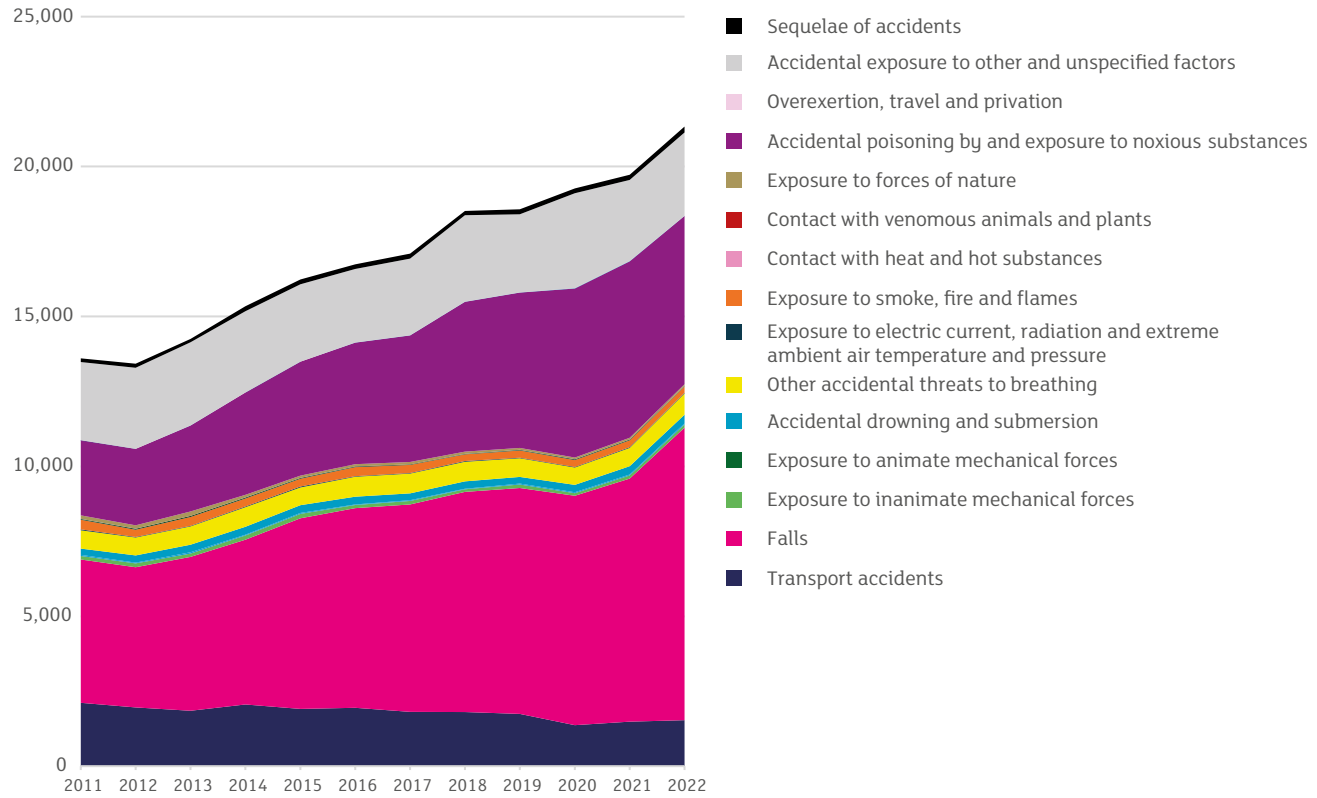
Trends

We have already seen how accidental deaths have been rising over recent years. The charts below highlight the contributions of different accident types to this trend. They show that:

- The number of deaths caused by falls has risen by 90% since 2013
- Deaths caused by accidental poisonings are up 96% on 2013
- Deaths caused by non-drowning accidental threats to breathing have increased by 17% since 2013
- Drowning deaths have risen by 13% since 2013
- Most other causes of accidental deaths have stayed at similar levels or consist of small numbers which make comparing year-on-year changes challenging
- In cause of death data, transport deaths have fallen since 2013, though the Department for Transport's official statistics show that the rate of progress has slowed dramatically – at just 9% over the last decade, compared with a 47% reduction in the previous decade. We discuss trends relating to road safety in more depth in Chapter 5.

Figure 12: Underlying causes of death: accidents, UK, 2011 to 2022

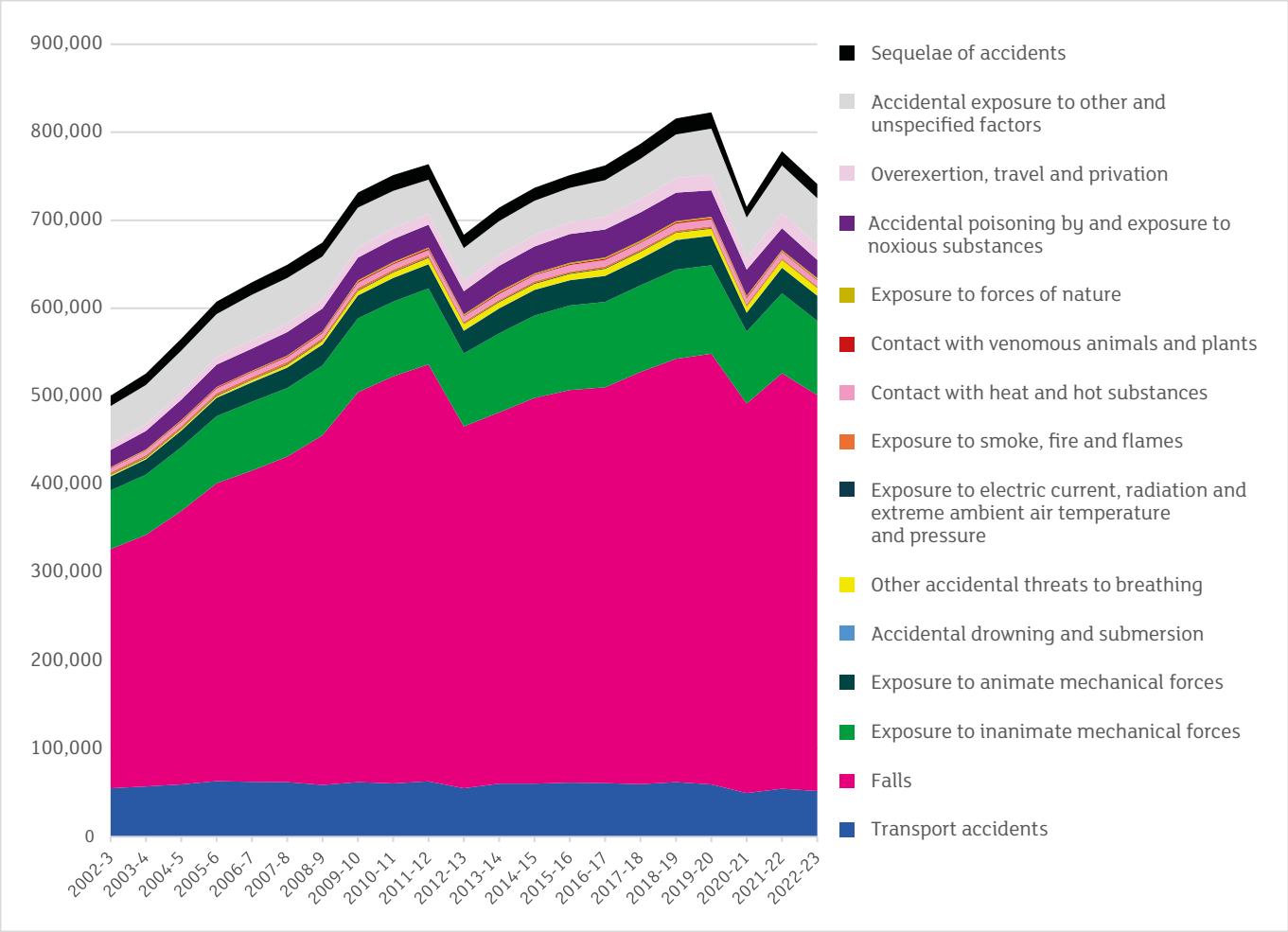
Source: Appendix 1, Table 2



Causes of death are coded in more detail, but in many causes the number of deaths under any individual cause code are too small to track year-on-year changes meaningfully; or, in some cases, there are so many recording in 'unspecified/other' residual sub-categories that it makes tracking more specific causes of deaths within a category of doubtful use.[11]

Figure 13: Accident-related hospital admissions, England, 2002/3 to 2022/3

Source: Appendix 2, Table 1



For accident-related admissions, since 2002/3 the per capita rate of admissions has:

- Increased by 44% for falls (amounting to 178,096 extra admissions in 2022/3 – 66% up in nominal terms)
- Increased by 56% for 'exposure to animate mechanical forces' (28,584 additional admissions, a nominal increase of 79%)
- Increased by 475% for 'other accidental threats to breathing' (7,250 more cases – a nominal increase of 6.6 times the 2002/3 figure)
- Risen by 27% for contact with heat and hot substances (+2,104 cases)

- Gone up by 106% for overexertion, travel and privation (+9,783 admissions)
- Increased by 104% for 'exposure to forces of nature' (+934 more cases)
- Increased by 10% for 'exposure to inanimate mechanical forces' (17,529 extra admissions – a rise of 29% nominally).

In the same period a few categories reported declining rates of hospital admissions due to accidents:

- Decreased by 19% for drownings (24 fewer cases annually)
- Decline of 34% per capita admission rate for exposure to electric current, radiation or extreme temperatures or pressures
- Decrease of 44% per capita admission rate for exposure to smoke, fire and flames
- Fall of 7% per capita admission rate for accidental poisonings – though the nominal figure is up 1,327 admissions (an increase which has been outpaced by population growth).

These trends highlight how most accident types have seen admissions increase both numerically and as a per capita rate, including amongst those types which are the biggest contributors to accident-related admissions as a whole. This is a very worrying trend and is driving the high cost to the NHS of accident-related treatments.

Types of accident in depth

These graphs highlight accident types which are either prominent causes of serious injury or are on the rise. A National Accident Prevention Strategy needs to capture all of these accident types. But it is clear that some are going to be key areas for intervention. Our analysis has allowed us to pinpoint several types of accident which are especially important. We will spend the rest of this chapter discussing them.

It is worth noting that the next chapters look at how accidents occur in different sectors of our social world – the roads, home, leisure and work. Before moving on to those areas, it's important to recognise that many accident types cut across these sectors too – falls, for instance, can occur on the pavement, at home, while working and while on an outing or playing sports. Choking deaths can occur anywhere too. Poisonings can happen at work, school or the home for very different reasons.

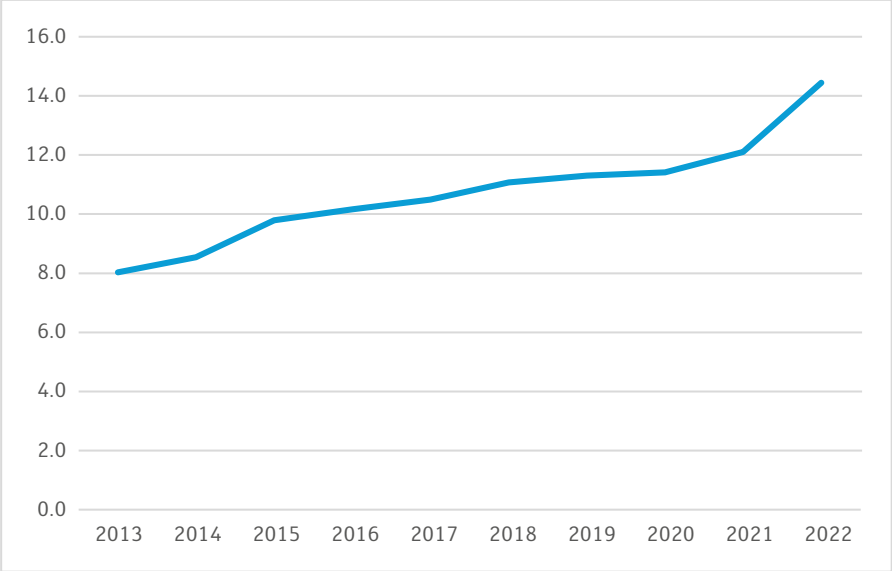
It is therefore important to think of accidents by type and by 'sector'. Addressing falls, for instance, cannot look at just falls as a broad category – it requires understanding that falls in the home can occur differently from falls at work, involve different regulatory frameworks, and require different interventions to prevent. NAPS must recognise both trends in the types of accident outlined below and how they intersect with our social worlds as outlined in the following chapters.

Falls

Falls are the single biggest cause of accidental deaths and serious injuries in the UK. They account for almost half of accidental deaths (9,759; 46%) and over 60% of accident-related hospital admissions in England (over 450,000). The rate of falls deaths (per capita) has increased by 81% over the last decade, highlighting not only the severity of the issue, but its increasing prevalence. Hospitalisations have also increased by 44% since 2002/3; hospital stays for falls are one of the longest of any accident type, at 7.2 days on average; in 2022/3, they took up 3.2 million bed days in the English NHS alone.[12]

Figure 14: Deaths due to falls, UK, rate per 100,000 people, 2013 to 2022

Source: Appendix 1, Table 4



Despite these huge numbers and the very worrying trajectory, we know little about the causes of these serious falls. In 2022, 84% of fatal falls were officially coded as 'other and unclassified falls', despite 19 specific categories of fall included in the ICD coding system. This introduces much uncertainty into the picture, though we do know that at least 879 people died as a result of falls on stairs in 2022, 189 died due to slips and trips on the same level, and 147 due to falls from a bed.[13]

Hospital admissions data are more complete, though 35% of falls are still coded as 'unspecified'. In 2022/3, 21% of all fall-related admissions in England were due to slips, trips and stumbles on the same level (95,372), while 18% involved other types of fall on the same level (80,903). 9% (39,157) involved falling on stairs, and 4% involved falling from a bed. There were numerous other categories each with hundreds of patients in.[14] We also know that in the workplace, slips and trips account for 32% of all reported non-fatal injuries – the most common category of all work-related accidents – while a further 8% involve falls from height.[15] Given that the database these figures were drawn on captured 60,645 injury reports, it is clear that falls are involved in many thousands of workplace injuries.

Nevertheless, most serious falls appear to happen at home – further highlighting the scale of the issue. In 2019,[16] 54% of fatal falls in England occurred in the home and 14% occurred in residential institutions.[17] Hospital admissions data for England showed that 53% of falls-related admissions involved a fall taking place at home; a further 8% occurred in school, as well as another 8% at residential institutions; 5% occurred on the street, and just 2% at work or in trade areas (19% lacked any geographical data).[18]

Figure 15: Hospital admissions due to falls, England, 2022/3

Source: NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23' (retrieved 23 September 2024).

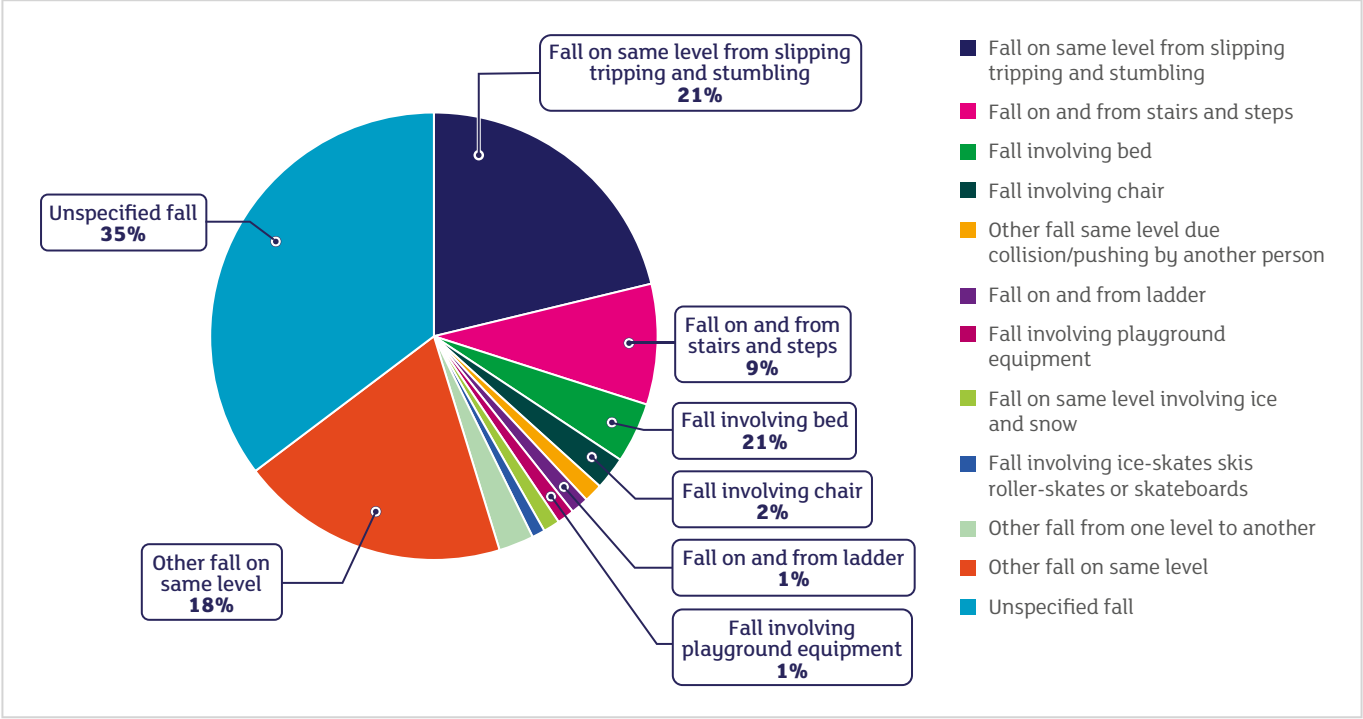
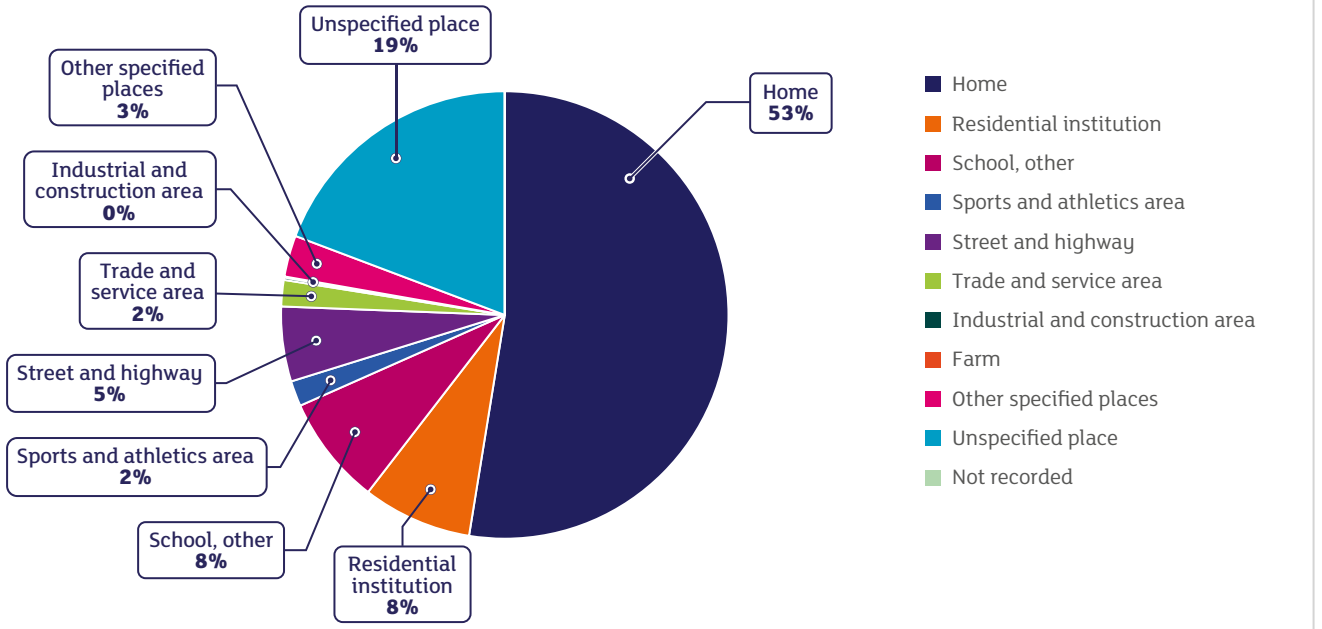


Figure 16: Location of falls leading to hospital admission, England, 2021/2

Source: NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2021-22' (retrieved 23 September 2024).



Falls can often cause a range of injuries and recovery can take a long time. They can occur to anyone at any age, but they are most often fatal or serious amongst older people, in part because they are more likely to fall and because of their physical frailty. The over 75s accounted for 57% of fall-related admissions in 2022/3 [19] and 81% of fall-related deaths in 2022. [20]

These falls are life-limiting even for those who survive them. Falls are a major cause of hip fractures, which can seriously impact on mobility and reduce life expectancy even for those who 'recover' (about a third of patients die within a year of suffering a hip fracture [21]). They are also very costly. In 2016, NICE estimated there were over 70,000 hip fracture cases a year, which cost the NHS £2bn annually to treat.[22] These figures continue to rise: the Royal College of Physicians' National Hip Fracture Database reported that there were more hip fractures in 2022 than in any previous year on record in the UK.[23]

Even among healthy, working-age adults, falls can be very serious injuries. RoSPA regularly hears about workers who are paralysed or spend months recovering from a fall. Some never fully recover. There is limited evidence around how much this costs the UK economy annually in terms of lost economic output, economic inactivity and reduced consumer spending, but it must be very substantial. Tens of thousands of children are also admitted to hospital annually due to falls and some are sadly killed every year. These injuries create costs to those hurt, their families and the wider economy.

With the volume of falls and costs already at these levels, and with our population ageing, we cannot continue to allow the number of serious falls to keep rising unchecked. They are preventable with the right interventions. Most falls are the result of the interplay of multiple risk factors, like 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.

There is no one-size fits all solution, but nor is it inevitable that falls happen or lead to serious injury, even among the elderly. There have been many studies which have shown that having tailored, multifactorial falls prevention strategies can significantly reduce the risk of falls, including among older adults,[24] though proper implementation is key to maximise these benefits. There is good evidence that strength and balance exercise is effective in reducing falls in older adults. Exercise programmes reduce the rate of falls and the number of people experiencing falls in older people living in the community.[25] Commissioning falls prevention work at a local level can be complex and involve multiple stakeholders, so we were pleased when, in 2017, Public Health England and the National Falls Prevention Coordination Group jointly produce a consensus statement on commissioning.[26]

However, given that deaths and hospitalisations have continued to rise, we are calling for a broader range of measures. To start reversing the rising number of falls in the UK, we are calling on Government to:

Policy recommendation

- Revise the Disabled Facilities Grant funding strategy to reflect rising building material and labour costs [27]
- Legislate for the adoption of Safer Stairs by incorporating BS-5395-01 into the Building Regulations *(see also, Chapter 6 for our recommendations on home safety)*
- Promote healthy ageing, in particular opportunities to remain active into older age
- Support partnership working between the health and housing sectors
- Invest in Care and Repair services (for maintenance and adaptation of homes)
- Support (including through funding for local authorities) strength and balance programmes to reduce the risk of serious falls in older people
- Roll out permanent national home safety programmes to deliver risk assessments, advice and equipment (including fitting of equipment where appropriate) to vulnerable adults, older people and disadvantaged households with young children
- Ensure that interventions recognise the multifactorial nature of falls and implement multifactorial falls reduction programmes.

Poisonings, alcohol and drugs

Poisonings are among the major causes of accidental death in the UK, but are a broad category with a complex range of causes. They caused 5,609 deaths in 2022, up 96% from 2013 (with a per capita increase of 86%).[28] Poisonings also caused 20,596 hospital admissions in England in 2022/3, an increase of 13% per capita on 2002/3, but far below a peak of 27,447 in 2015/16.[29]

Most poisoning cases involve drugs or medications, including 4,974 of the deaths in 2022 (up from 2,293 in 2013) and 17,448 admissions in 2022/3. The leading causes of these drugs deaths have changed over time; in 2022, they included 2,259 from exposure to narcotics, which had risen sharply in the 2010s but has been falling since 2019, and 2,082 deaths due to 'other and unspecified drugs' in 2022, a sharp rise on 2019.[30] The admissions have mostly been driven by nonopioid analgesics, antipyretics and antirheumatics, with cases increasing in the early 2000s and mid-2010s before sharply falling. Since 2011/12, admissions due to accidental poisoning by narcotics have doubled and despite starting to fall remain twice as high as they were in 2002/3.[31] There are important national differences in poisoning rates, which are discussed in Chapter 11.

Alcohol poisoning caused 518 deaths in 2022, a figure which has been broadly static across the last decade. There were also 350 hospital admissions for this in England for 2022/3.[32]

Alongside poisonings, alcohol and drug use play a major role in other forms of accidents, by impairing reactions and spatial coordination. Our chapter on road safety discusses drink driving (Chapter 5), but either substance can cause many other accidents, especially falls. It can also make it harder for people to recognise the extent of their injuries and can make treating injured patients complicated (for instance, heavy intoxication can mimic symptoms of serious head injuries).

Threats can also come in other forms. Accidental carbon monoxide poisoning has killed on average 42 people a year since 2013, for instance, and remains an important hazard in the home especially (see Chapter 6 for more information).

Children are also vulnerable to accidental poisoning, with 1,956 hospital admissions in England alone among under 5s in 2022/3, though thankfully efforts in recent years have seen this number fall and the number of poisoning-related deaths in children are now thankfully close to zero annually.[33] While this trajectory is promising, we must continue to be vigilant. Public awareness, training and input from industry are vital to keeping children safe from poisoning. For instance, RoSPA has been working with the UK Cleaning Products Industry Association (UKCPI) to deliver the 'Take Action Today, Put Them Away' campaign to support families on how to use and store cleaning products safely; it operates at a local level and targets high-incidence areas.[34] However, families also need to be supported by home safety assessments and safety equipment (including the fitting of that equipment).

Government should recognise that this is therefore a complex area, with multiple contexts for poisoning, from illegal drug use to the accidental ingestion of a hazardous substance. There is a need for targeted interventions like the 'Take Action Today' campaign, as well as interventions which offer home safety assessment, equipment and fittings (see Chapter 6 for some examples and recommendations), and multi-agency partnerships to deliver support for those engaging in substance abuse. There is also a need to recognise the risks to other vulnerable people, including children, older people and those with learning disabilities or neurological conditions, who may ingest poisonous substances unintentionally.

Figure 17: Deaths due to accidental poisoning, UK, 2013 to 2022

Source: ONS, NRS and NISRA, underlying cause of death statistics, 2013 to 2022, analysis of 3-digit ICD code data for range X40-X49 (see Appendix 1, Table 1 for more detail on sources).

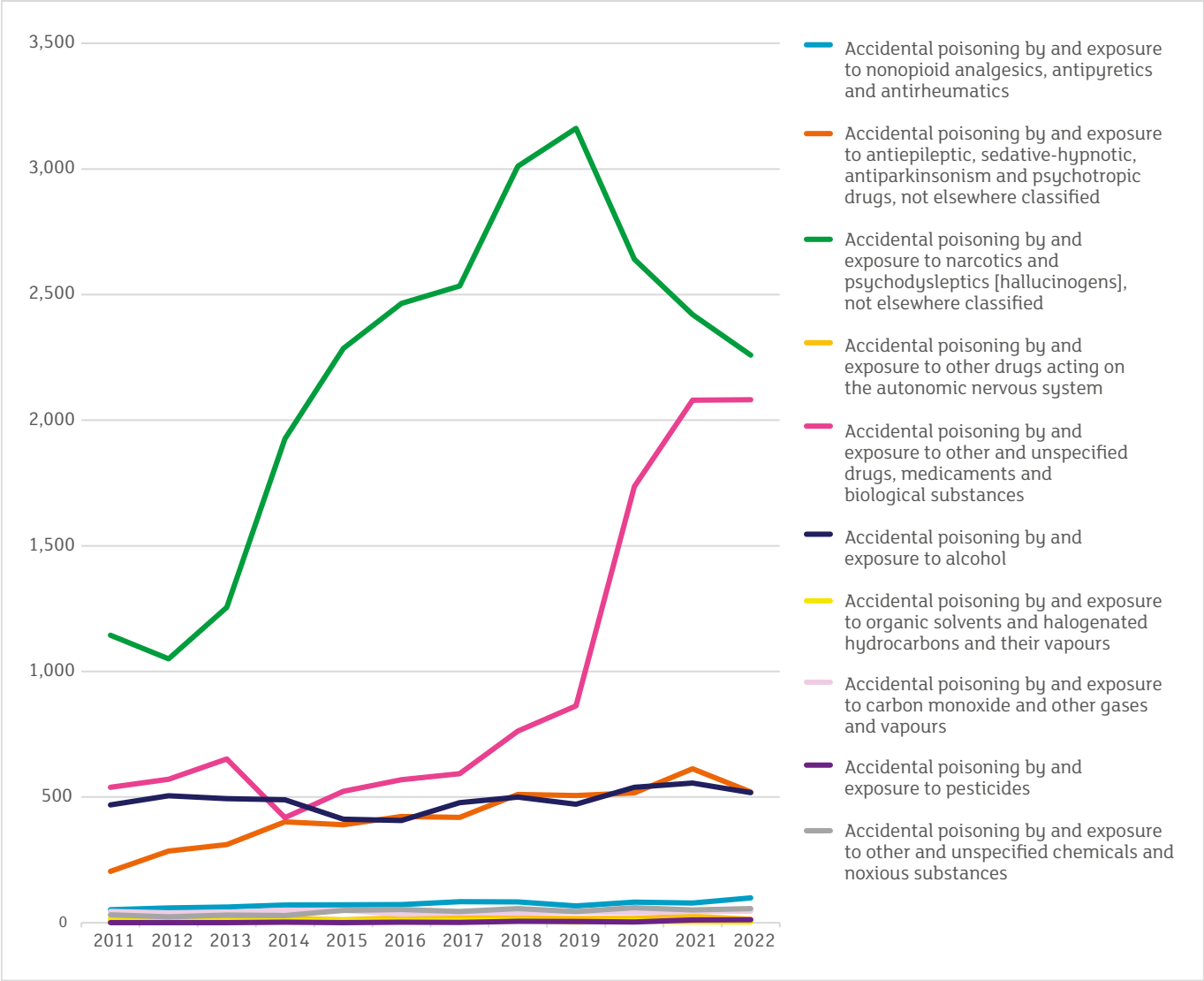
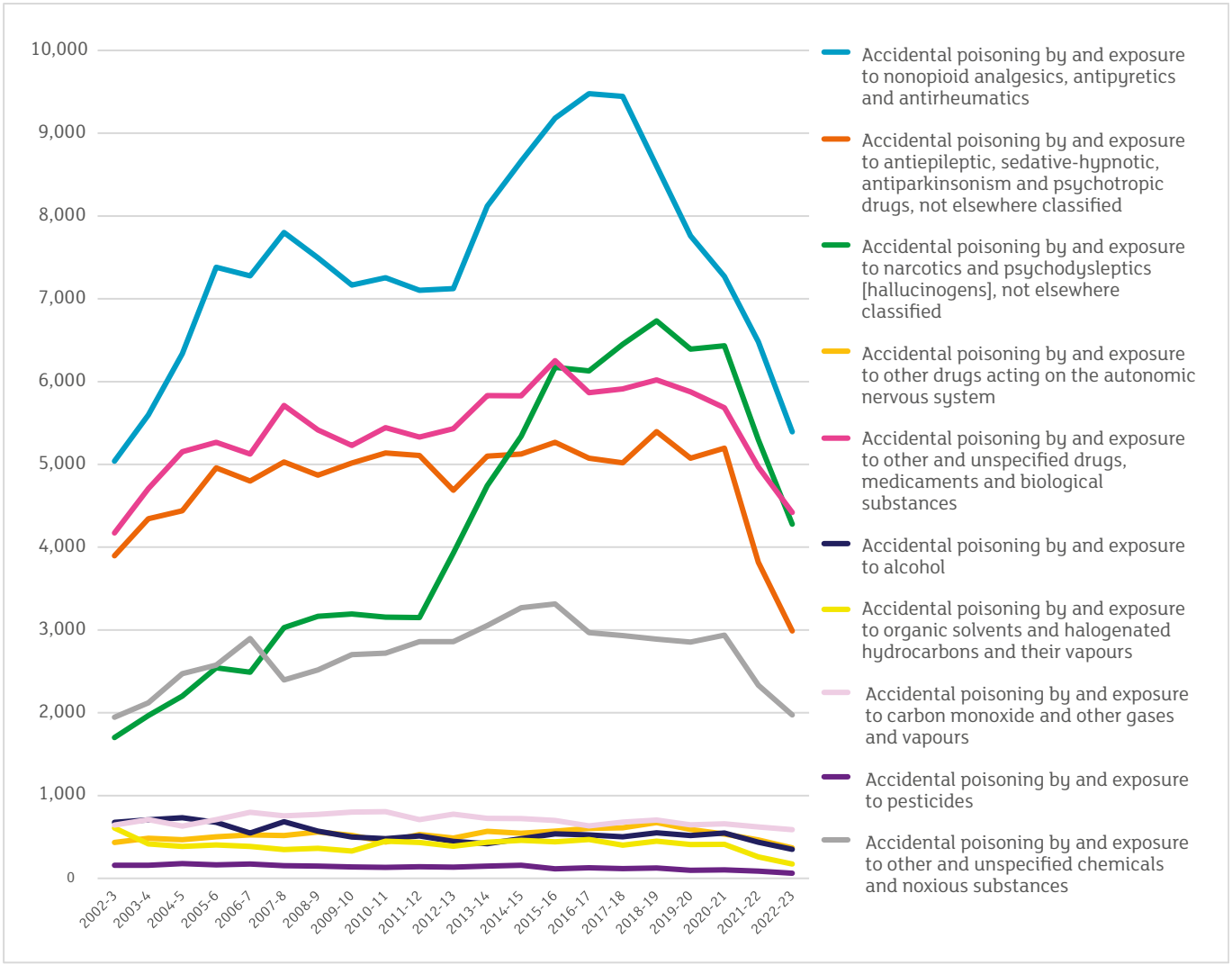


Figure 18: Hospital admissions due to accidental poisoning, England, 2002/3 to 2022/3

Source: NHS England Digital: Admitted Patient Care Activity and earlier Hospital Episode Statistics datasets, 2002/3 to 2022/3, analysis of 3-digit ICD code data for range X40-X49.



Crushing, striking, and machinery

These accidents – collectively known in medicine as being caused by 'inanimate mechanical forces' – are a cause of 11% of accident-related hospital admissions, but only 0.5% of accident-related deaths.[35] This is a broad category of accidents, which covers injuries caused by striking something other than a person or animal; for instance, 38 of the 105 deaths were by being struck by a thrown or falling object, and 15 were by striking against or being struck by other objects; a further 11 involved being caught or crushed, 15 were caused by contact with sharp objects (such as knives or glass).[36]

The per capita rate of deaths in this category has been falling over the last decade (-14% on 2013),[37] but, in England, there were still 84,000 hospital admissions in 2022/3 and the per capita rate for admissions is up 20% on 2002/3.[38] The following accounted for 84% of these admissions in 2022/3: striking against or struck by non-sports, non-thrown and non-falling objects (24%); caught, crushed, jammed or pinched in or between objects (19%); contact with knife (17%); and foreign body entering into or through eye or natural orifice (23%). The most substantial increase in cases is 'contact with knife or dagger', with incidents more than doubling between 2016/7 and 2022/3. Striking/struck by other objects is the largest category, but admissions have fallen in recent years, after a sharp rise; a similar trend is observable in crushing accidents.[39]

There is limited data on where these incidents happen: 51% of deaths in this category follow accidents occurring in the home (another 7% occur in residential institutions), with 10% in industrial settings and 2% in trade areas.[40] Unfortunately, 49% of hospital admissions coded to this type of accident do not have data on the location of the accident; at least 29% take place in the home, with 6% in school and all other categories of place accounting for 1-4% each.[41] Some of these accidents might result from work, for instance on building sites or while working with machinery, though with many taking place at home, it could be that DIY, gardening, working in the kitchen and sports may account for a significant proportion of these cases. The following sector-specific chapters will discuss work, home and leisure in more depth.

Threats to breathing

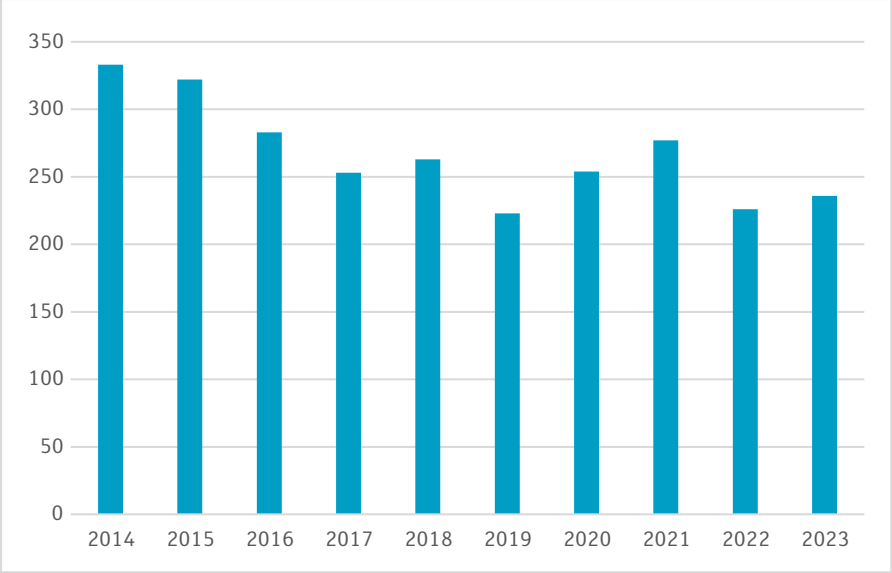
Drowning covers a wide range of scenarios. The national statistics agencies (ONS, NRS and NISRA) report a combined 289 fatalities caused by accidental drowning in 2022, of which 130 were in natural water, 49 were in a bath tub and 11 were in a swimming pool; the rest were unspecified. Overall, this was an increase of 13% from 256 in 2013, and a 7% increase per capita.[42] In England, hospital admissions data show that 300 were admitted due to accidental drownings or other submersions in 2022/3, down from 324 in 2002/3 (the figure has tended to hover between 300 and 400 in the intervening years). Drownings constitute a rare but highly lethal type of accident.[43]

However, methodological issues make recording a total figure complex. A more accurate picture of drownings in natural water is provided by the Water Safety Forum's WAID database (which RoSPA administers), which uses data from coroners and emergency responders; it showed that there were 236 accidental water deaths (in natural water) in 2023, up from 226 in 2022 but well below the 2013-15 three-year average of 344.[44] This does not capture data on people who were rescued and survived.

We discuss natural water drownings in more depth in our chapter on leisure (Chapter 8).

Figure 19: Accidental drowning deaths, UK, 2014 to 2023 (WAID)

Source: National Water Safety Forum, WAID Annual Fatal Incident Reports (2014 to 2023)



Alongside drowning, other threats to breathing constitute a major cause of serious and fatal accidents. These include suffocation, strangulation and choking. In 2022, 711 people died in the UK following these types of accidents, including 222 deaths due to accidental hanging or strangulation (18 of them in bed), 308 due to choking on food, 59 due to choking on gastric contents and 91 due to choking on other objects.[45] Overall, the number of these deaths has increased by 16% on 2013, and the per capita rate has gone up by 11%.[46]

These accidents constitute a relatively small but very serious cause of hospital admission. This category of accidents has the longest mean average hospital stay of any category, at 12.6 days, more than double the rate for all accidents.[47] There were 8,543 hospitalisations for this category in 2022/3, up starkly from the 1,293 cases in 2002/3 (an almost 5-fold increase).[48] The largest categories are 'inhalation of gastric contents' (+2,153 cases; +1,545%), 'inhalation of food' (+2,091 cases; +345%) and 'inhalation of other objects' (+2,346 cases; +1,479%).[49]

Figure 20: Deaths due to other accidental threats to breathing, UK, 2013 to 2022

Source: ONS, NRS and NISRA, underlying cause of death statistics, 2013 to 2022, analysis of 3-digit ICD code data for range W75-W84 (see Appendix 1, Table 1 for more detail on sources).

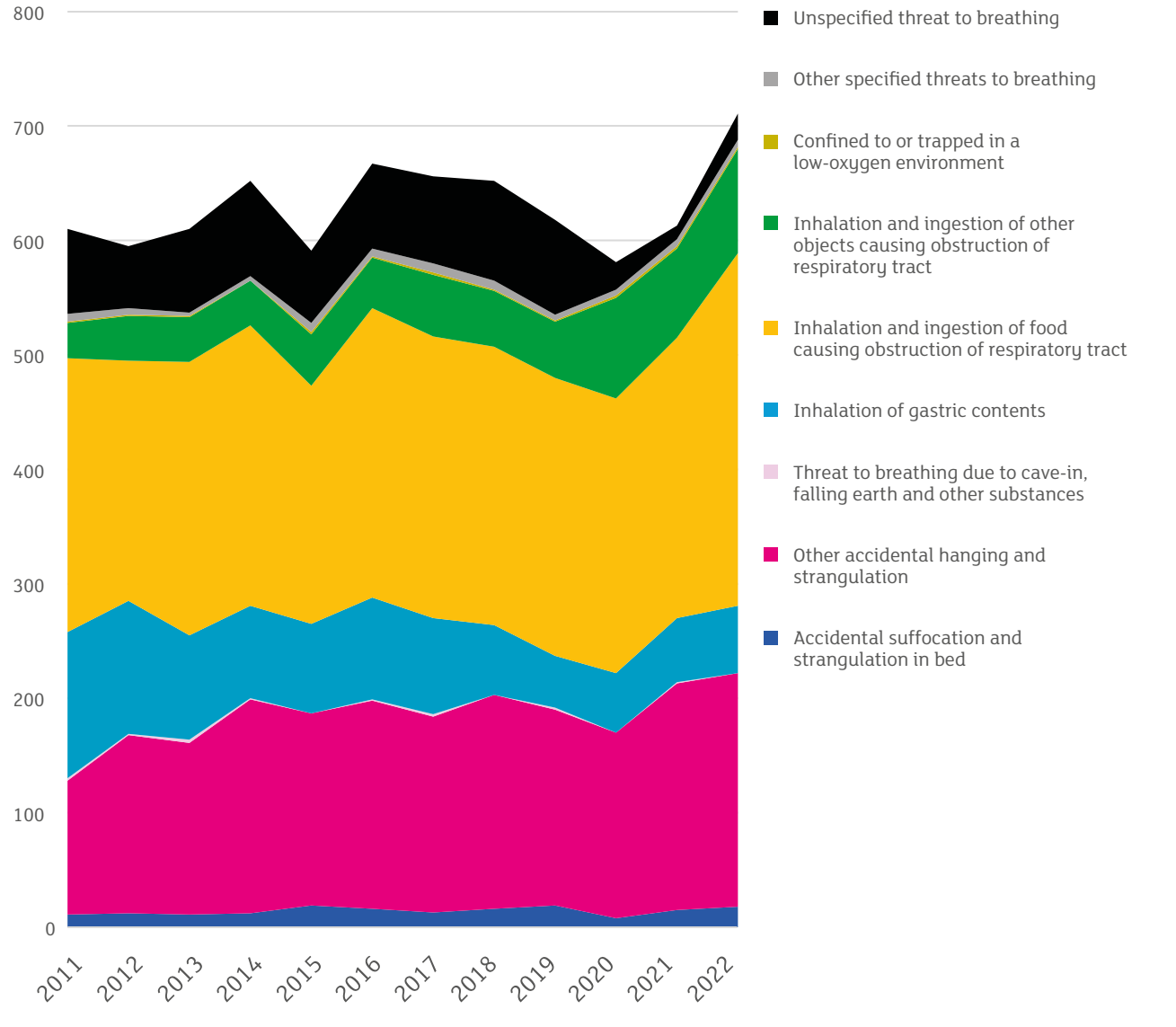
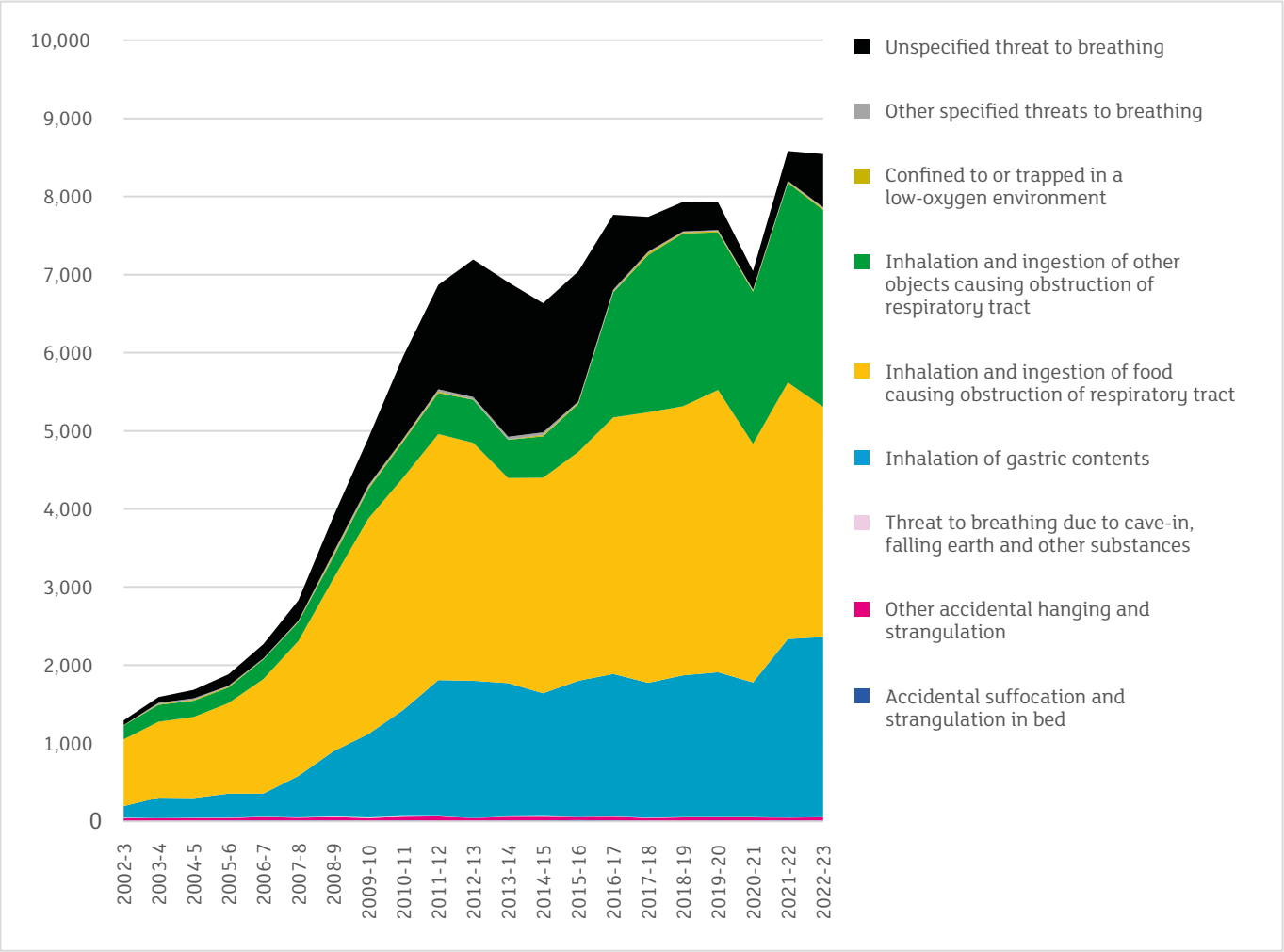


Figure 21: Hospital admissions due to other accidental threats to breathing, England, 2002/3 to 2022/3

Source: NHS England Digital: Admitted Patient Care Activity and earlier Hospital Episode Statistics datasets, 2002/3 to 2022/3, analysis of 3-digit ICD code data for range W75-W84.



Fires

In 2022/3,[50] there were 315 fire-related deaths in Great Britain[51] and 7,499 fire-related casualties, of which over 3,000 needed hospital treatment, including over 650 with severe injuries. Across Great Britain, there were 216,628 fires, including 32,669 in dwellings (with 725 of these in high-rise buildings in England). Fires can be started intentionally, but in both England and Scotland 90% of dwelling fires were accidental, and in England 91% of dwelling fire-related fatalities were accidental.[52]

Data shows that the number of fires has fallen since the early 2000s. In England, fire call outs have been falling steadily since 2004 (when they peaked at almost 500,000), though they have plateaued since around 2012/3, with some annual fluctuations (see Figure 22).[53] Fatality levels have also fallen over the long-term, though virtually all the decline occurred between 1982 and 2015; figures have since plateaued, being 'erratic but broadly at the same level'.[54] Non-fatal casualties have been falling since the late 1990s and have tended to continue falling. A similar plateau in terms of fire incidents is observable in Wales, though fatalities have tended downwards,[55] and in Scotland, where fatality numbers have also 'levelled off since the early 2010s'.[56]

Fires can, of course, be devastating – fatal in the worst cases, but often leaving people injured and causing significant damage to property. It is essential that they are included in a National Accident Prevention Strategy. In this paper, we primarily discuss causes, issues and prevention in the home safety section (Chapter 6), but we acknowledge that fire safety does not stop at the front door and is also important in work and leisure too.

In Chapter 6, we highlight the multiple systemic failings that led to the devastating Grenfell Tower fire in 2017; we fully endorse the recommendations made in both phases of the Grenfell Tower Inquiry and want to see them promptly implemented by Government (see that chapter for more detail). We also remain deeply concerned about the number of buildings that are still clad in unsafe material, seven years on from the Grenfell Tower tragedy.

We also note here that vulnerability is closely associated with an elevated risk of fire-related injury: 'the risk of harm from fire is substantially increased by ill health, disability and addiction'.[57] This risk is even higher among vulnerable people when they smoke. Care providers will need to be vigilant and should consult with fire services for advice if necessary; the National Fire Chiefs Council provides advice in more detail and notes that risk reduction measures should be developed in line with an individual's behaviour and needs, rather than the general type of housing they are in.[58]

Figure 22: Incidents attended by fire and rescue services in England: fires, 2003/4 to 2022/3

Source: Home Office, Fire Statistics Data Tables, Table 0102a (July 2024)

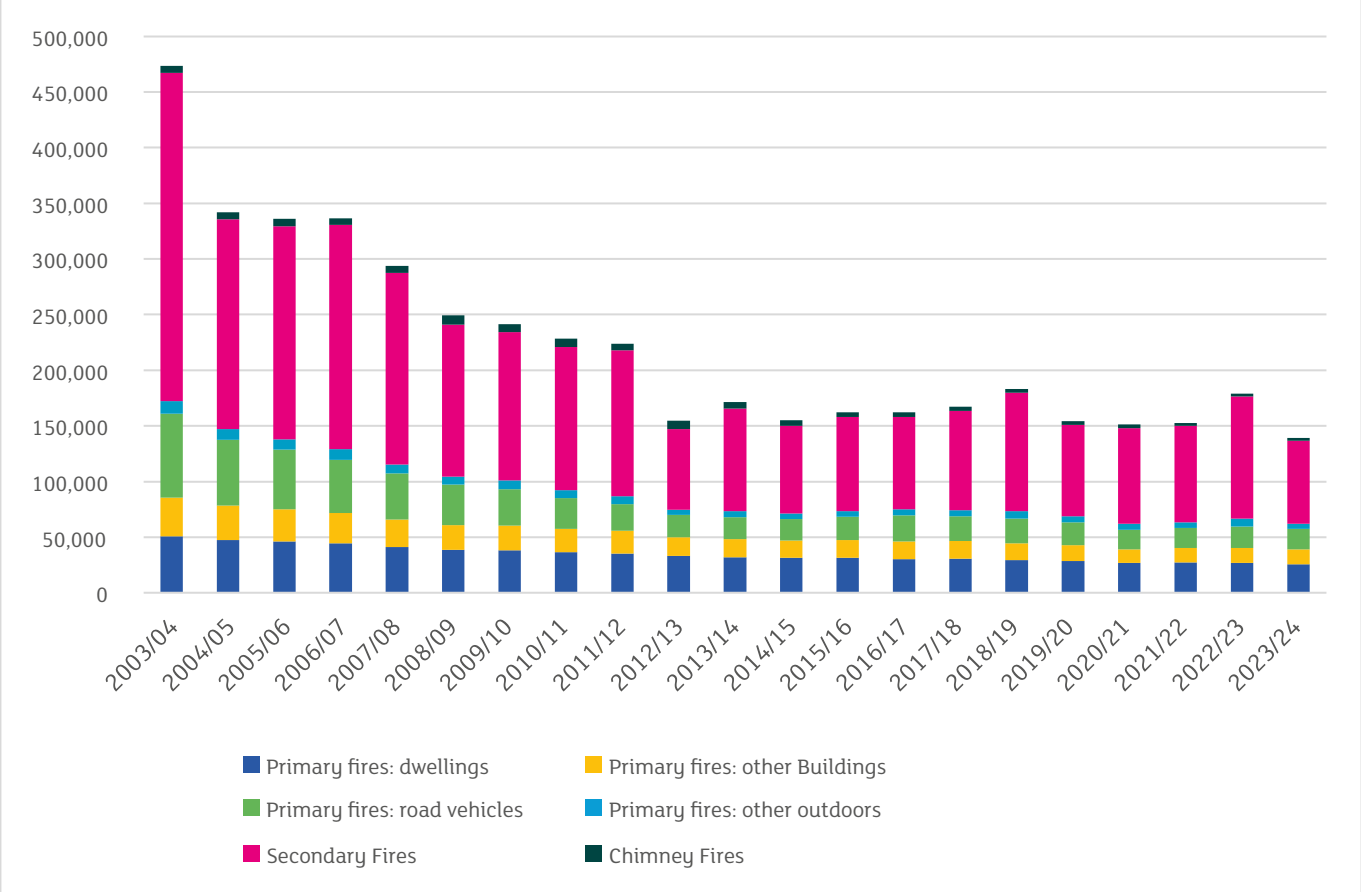
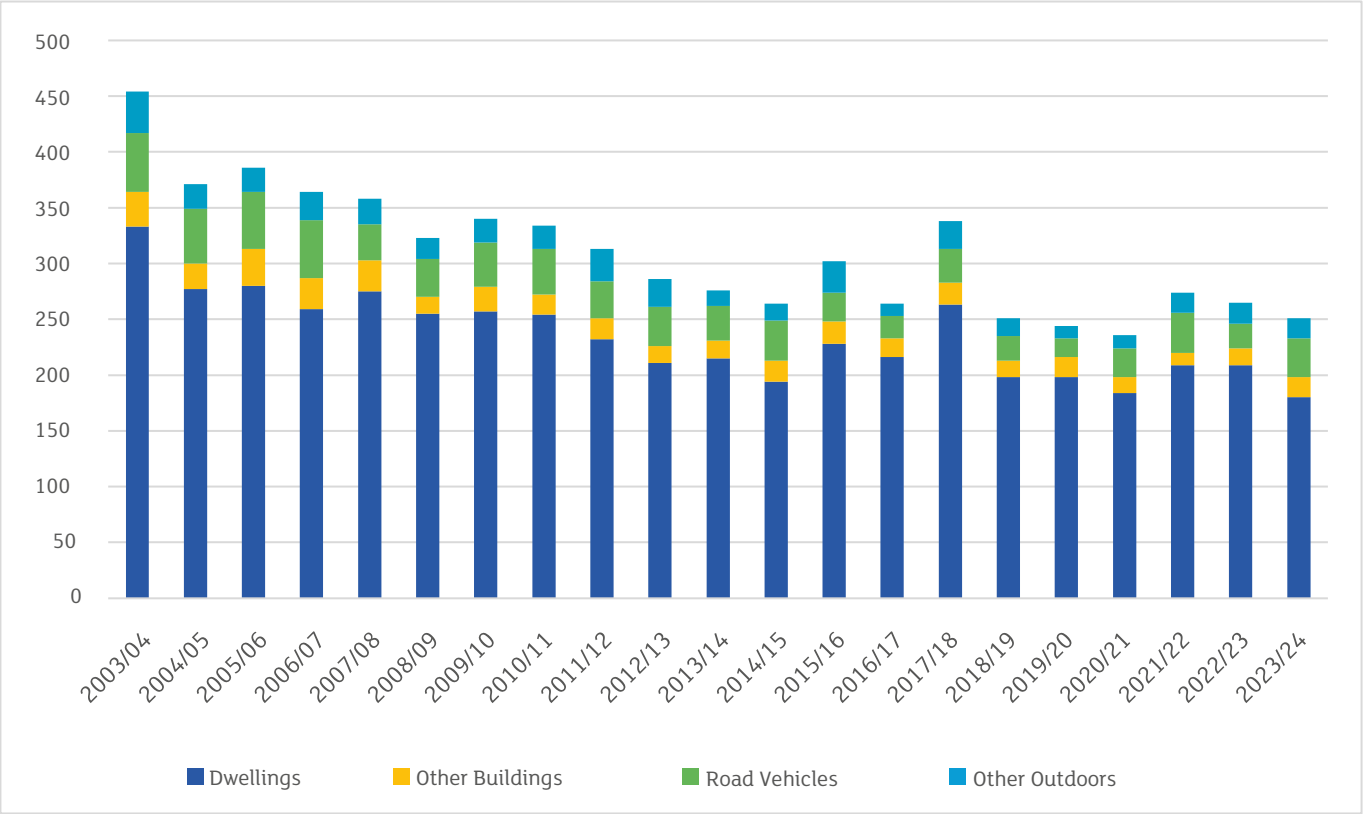


Figure 23: Fire-related fatalities, England, 2002/3 to 2022/3

Source: Home Office, Fire Statistics Data Tables, Table 0502a (July 2024)



Electricity

We note that exposure to electric current accounted for over 300 hospital admissions in England in 2022/3 and 20 deaths in 2022 across the UK.[59] Electrical safety remains an important area of concern; although serious injuries are relatively uncommon, they are often serious enough that they can be fatal.

Animals and people

There were 33 deaths in this category in 2022; only three cause codes had more than 5 deaths that year. These were 'hit, struck, kicked, twisted, bitten or scratched by another person' (7), 'bitten or struck by a dog' (6), 'bitten or struck by other mammals' (5), and bitten or stung by nonvenomous insect or arthropod (5).[60] However, when it comes to hospitalisations, this is an important category, accounting for 4% of all accident-related admissions in England in 2022/3: 28,584 cases. The per capita admission rate is up 59% on 2002/3.[61]

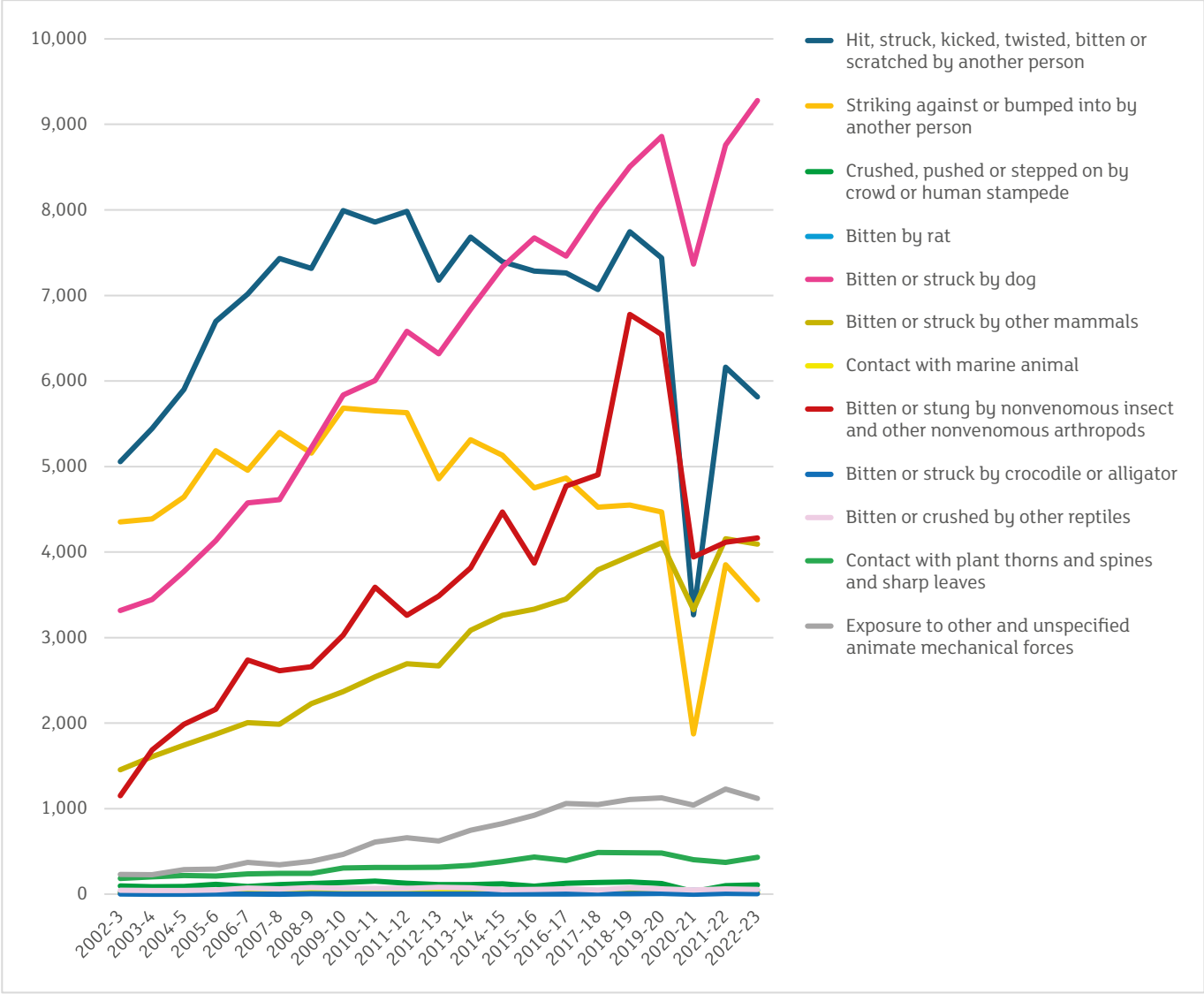
The single largest type of admission in this category is dog bites, at almost 9,277 admissions annually (32% of accidents in this category). The rate of dog bite admissions per capita has increased by 280% since 2002/3 – a near trebling. Next largest was 'hit, twisted, bitten or scratched by another person' – 5,813. Though still higher than in 2002/3, this is a decline on 2011/12 peak of 7,984. Other key categories included 'bitten or stung by non-venomous insect/arthropod' (4,166), 'bitten or struck by other mammal' (4,094), 'striking against or bumped into by another person' (3,441). The latter has been declining since the late 2000s, while the other mammal bites have increased steadily and the insect bites cases rose sharply until 2018/19 before falling back to 2014/15 levels (still almost four times their number in 2002/3).[62]

The rate of dog bites is particularly concerning, given their potential for serious injury and disfigurement, and their continued sharp rise over time. There are already specific criminal offences relating to dog ownership, but evidently these are not doing enough to prevent the rise in cases. We would urge Government to work with healthcare providers, animal charities and the public to understand the causes of this rise and develop interventions. In the meantime, we take the view that people should ensure that their dogs are well-trained and socialised, and take appropriate precautions with them, especially in public places and around vulnerable people like children.

The rise in admissions due to insect bites is also surprising and warrants further research – is this an artefact of better recording, worsening allergies or changes to our insect population, possibly due to climate change? We would like to see more research into these questions.

Figure 24: Hospital admissions due to 'accidental exposure to animate mechanical forces', England, 2002/3 to 2022/3

Source: NHS England Digital: Admitted Patient Care Activity and earlier Hospital Episode Statistics datasets, 2002/3 to 2022/3, analysis of 3-digit ICD code data for range W50-W64.



Forces of nature

The UK is fortunate in that it experiences few natural disasters or freak weather events. As a result, the number of deaths attributed to 'forces of nature' are few. Sadly, however, 55 did die of these types of accident in 2022, including 35 who died of natural cold and 16 who died of natural heat. There were also 1,621 hospital admissions, up from 697 in 2002/3 – a 72% per capita increase. By far the main cause of these admissions is excessive natural cold, accounting for 1,008 cases, up 339 cases in two decades. Cases linked to excessive natural heat have risen from 43 in 2002/3 to 320 in 2022/3.[63]

The causes of this rise are complex and require investigation. It is possible that poverty and homelessness are implicated in cases, but it may also be relating to global warming, which is increasing the likelihood of extreme natural weather. 2022 had the highest number of deaths from heat since at least 2001, and it is probably no coincidence that this year also saw the UK's highest temperature ever recorded. We discuss the threat of climate change in Chapter 9.

Privation and overexertion

Privation and related causes are implicated in very few deaths in the UK. Sadly, 7 people died due to a lack of food in 2022, but otherwise there were no deaths related to this category of accidents. This likely reflects the UK's health and welfare services, which would be expected to 'catch' most cases of privation before they become fatal. Nevertheless, there were 53,294 hospital admissions for overexertion, travel and privation in 2022/3 (a per capita rise of 113%), with almost all of them being due to overexertion itself.[64]

We are concerned about the rise in cases of overexertion. There is a lack of data on the causes or contexts of this, but we are mindful, for instance, of increasing weather extremes. We are also concerned about whether this is connected to working practices. Government needs to better understand this category of accidental injuries.

Policy recommendation

- Government should conduct a review into the rising prevalence of serious cases of overexertion among the population.

Transport incidents

We discuss transport-related incidents in Chapter 5 as they relate almost entirely to road safety.

[1] The hospital admissions data for England for 2023/4 were released on 26 September 2024. Although this was too late for us to incorporate the results into our report, we note that accident-related admissions were at 782,707 (across V01-X59 and Y85-Y86). This was a rise of 5.5% on 2022/3. See NHS England Digital, 'Hospital Admitted Patient Care Activity, 2023/24: External Causes', 26 September 2024.

[2] Based on yearly cause of death data from the Office for National Statistics (ONS) for England and Wales, the National Records of Scotland (NRS) and the Northern Ireland Statistics and Research Agency (NISRA), for ICD codes V01-X59 and Y85-Y86. Collated for the years 2013 to 2022, the latest release at the time of writing. Summary tables in Appendix 1. For total accidental deaths, see Appendix 1, Table 1.

[3] Made by comparing the cause of death data cited in footnote 2, with mid-year population estimates from the ONS. Figures in Appendix 1, Table 3.

[4] NHS England, 'Hospital Admitted Patient Care Activity', 'External Cause' data and earlier equivalent summary tables from the Hospital Episode Statistics. See Appendix 2, Table 1.

[5] Based on dividing the 2022/3 figure by 84.48 and multiplying the result by 100, because England comprises 84.48% of the UK's population (see mid-year population estimates in Appendix 1, Table 3).

[6] Made by comparing the admissions data cited in footnote 4 with the mid-year population estimates cited in footnote 3. See Appendix 2, Table 2.2.

[7] Owing to changes in the way that Accident & Emergency attendance data is published, it is not possible to estimate accident-related attendances in 2022/23, and, as 2020/21 and 2021/22 were affected by the Covid-19 pandemic, we have opted to use the latest pre-pandemic data.

[8] See Appendix 3 for methodology.

[9] The statistics in this section are based on Appendix 1, Table 2 and Appendix 2, Table 1.

[10] Owing to differences in the way the data is collected, this figure is an undercount compared to the Department for Transport's Stats19 database, which showed 1,711 fatalities on the road in 2022. See Appendix 4, Table 3.

[11] For instance, in 2022 there were five times more fall deaths coded W19 'unspecified fall' than all other fall-related deaths combined, making tracking changes in any other fall code challenging. We address data capture issues like this in Chapter 14.

[12] Data on accidental deaths are from Appendix 1, Table 2 and for hospitalisations from Appendix 2, Table 1. Data on length of stay is from NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23' (retrieved 23 September 2024).

[13] Data taken from yearly cause of death data from the Office for National Statistics (ONS) for England and Wales, the National Records of Scotland (NRS) and the Northern Ireland Statistics and Research Agency (NISRA), available at the 3-digit ICD code level.

[14] Taken from analysis of NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23'.

[15] Health and Safety Executive, 'Non-Fatal Injuries at Work in Great Britain' (retrieved 23 September 2024).

[16] The last year when location of accident was coded.

[17] See Appendix 1, Table 11. Under ICD 10 Version 2016, 'residential institution' means children's homes, dormitories, homes for the sick, hospices, military camps, nursing homes, old people's homes, orphanages, pensioners' homes, prisons and reform schools.

[18] Taken from analysis of NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23' (4-digit ICD codes).

[19] Appendix 2, Table 3.1.

[20] Appendix 1, Table 7.1.

[21] National Institute for Health and Clinical Excellence, *Hip Fracture: The Management of Hip Fracture in Adults* (2009), p. 2.

[22] National Institute for Health and Clinical Excellence, *Hip Fracture in Adults: NICE Quality Standard* (2016), p. 1.

[23] Royal College of Physicians, *15 Years of Quality Improvement: The 2023 National Hip Fracture Database Report on 2022* (2023), p. 3.

[24] Examples include: P. A. Logan et al., 'Multifactorial Falls Prevention Programme Compared with Usual Care in UK Care Homes for Older People: Multicentre Cluster Randomised Controlled Trial with Economic Evaluation', *BMJ*, 2021, 375; A. J. Campbell, et al., 'Falls Prevention over 2 Years: A Randomized Controlled Trial in Women 80 Years and Older, *Age & Ageing*, 1999, vol. 28, no. 6, pp. 513-8; M. E. Morris et al., 'A Randomized Controlled Trial to Reduce Falls in People With Parkinson's Disease', *Neurohabilitation and Neural Repair*, vol. 29, no. 8 (2015), pp. 777-785.

[25] See E. Orton et al., '"Real World" Effectiveness of the Falls Management Exercise (FaME) Programme: An Implementation Study', *Age and Ageing*, vol. 150, no. 4 (2021), pp. 1290-7. Catherine Sherrington et al., 'Exercise for Preventing Falls in Older People Living in the Community', *Cochrane Database of Systematic Reviews,* 31 January 2019.

[26] Public Health England, *Falls and Fractures Consensus Statement: Supporting Commissioning for Prevention* (2017); see also, Kevin Fenton, 'A New Focus on Falls Prevention', Gov.uk, 25 January 2017.

[27] The Disabled Facilities Grants are paid by the state to support grand aided housing adaptations for disabled people. Although more has been spent in recent years, and the number of new grants has risen considerable since the early 2000s, recent years have seen the number of new grants fall substantially owing to rising costs. See, Centre for Aging Better, *Homes: The State of Ageing 2023-24* (retrieved 23 September 2024.

[28] Appendix 1, Tables 2 and 4.

[29] Appendix 1, Tables 1 and 2.

[30] ONS, NRS and NISRA, underlying cause of death statistics, 2013 to 2022, analysis of 3-digit ICD code data for range X40-X49 (see Appendix 1, Table 1 for more detail on sources).

[31] NHS England Digital: Admitted Patient Care Activity and earlier Hospital Episode Statistics datasets, 2002/3 to 2022/3, analysis of 3-digit ICD code data for range X40-X49.

[32] See notes 30 and 31 above.

[33] For admissions among the under 5s in 2022/3, see Appendix 2, Table 3.2; for deaths among the under 5s, see Table 7.1. The admissions figure among under 5s in 2013/4 was 5,588, and the number of deaths among under 5s that year due to poisonings was 3 (see NHS, Admitted Patient Care Activity, 2013/4: External Causes, and cause of death reports by the ONS, NRS and NISRA for 2013).

[34] UKCPI, 'Take Action Today' (retrieved 23 September 2024).

[35] Appendix 1, Table 2, and Appendix 2, Table 1.

[36] Analysis of ONS, NRS and NISRA underlying cause of death data at 3-digit ICD code level.

[37] Appendix 1, Table 4.

[38] Appendix 2, Tables 1 and 2.

[39] NHS England Digital: Admitted Patient Care Activity and earlier Hospital Episode Statistics datasets, 2002/3 to 2022/3, analysis of 3-digit ICD code data for range W20-W49.

[40] Appendix 1, Table 5.2.

[41] NHS England Digital: Admitted Patient Care Activity and earlier Hospital Episode Statistics datasets, 2002/3 to 2022/3, analysis of 4-digit ICD code table.

[42] For the whole category, see Appendix 1, Tables 2 and 4; for more detailed cause data, see ONS, NRS and NISRA underlying cause of death data (see Appendix 1 for sourcing).

[43] Appendix 2, Table 1.

[44] National Water Safety Forum, *WAID UK 2023 Summary for the NWSF* (2024), p. 2.

[45] See Figure 20 below.

[46] Appendix 1, Table 4.

[47] Data on length of stay is from NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23' (retrieved 23 September 2024).

[48] Appendix 2, Table 1.

[49] See Figure 21 below.

[50] The data in this section is taken from official reported statistics from the Home Office's Fire and Rescue Incident Statistics (for England), the Welsh Government's Fire and Rescue Incident Statistics, and the Scottish Fire and Rescue Service's Fire and Rescue Incident Statistics. All relate to the year ending March 2023, as not all nations had published 2023/24 data at the time of writing. These publications are widely used and considered the best for reporting on fire fatalities. The ONS cause of death data shows 210 fire- or smoke-related deaths across the UK in 2022, evidently a substantial undercount.

[51] 14 in Wales, 42 in Scotland, and 259 in England. Northern Ireland do not publish their data.

[52] In England in 2022/23, 24,083 fires in dwellings were accidental, out of a total of 26,822 – 90%. Table 505a of the Home Office's Fire and Rescue Incident Statistics also shows that 91% of England's dwelling fire-related fatalities were accidental (185 out of 203). In Wales, the rate of dwelling fires which were accidental was also 90% (3,873 out of 4,305).

[53] Non-fire incidents have risen over the same period (of these almost 10% (17,795) were due to flooding and 31,849 were due to road traffic collisions; many others (68,000) were due to 'collaborating incidents').

[54] Home Office, 'Fire and Rescue Incident Statistics: England, Year Ending March 2023', 27 July 2023.

[55] Welsh Government, *Statistical Bulletin: Fire and Rescue Incident Statistics, 2022/3*, pp. 1, 29.

[56] Scottish Fire and Rescue Service, *Fire and Rescue Incident Statistics 2022-23* (Cambuslang, 2023), pp. 3, 16.

[57] National Fire Chiefs Council, 'Reducing Risk for Vulnerable People' (retrieved 1 October 2024).

[58] *Ibid.*

[59] The per capita rate of deaths has risen by 30% over the last decade, but the figures are too small to put this down to a rising trend. See Appendix 1, Table 2 and Appendix 2, Table 1.

[60] Data taken from yearly cause of death data from the Office for National Statistics (ONS) for England and Wales, the National Records of Scotland (NRS) and the Northern Ireland Statistics and Research Agency (NISRA), analysed at the 3-digit ICD code level.

[61] Appendix 2, Tables 1 and 2.2.

[62] NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23', available at the 3-digit ICD code level.

[63] Data taken from yearly cause of death data from the Office for National Statistics (ONS) for England and Wales, the National Records of Scotland (NRS) and the Northern Ireland Statistics and Research Agency (NISRA), and NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23', available at the 3-digit ICD code level.

[64] *Ibid.*

CHAPTER 04

Accidents at work

Accidents at work

Workplace accidents kill over a hundred people annually in the UK and cause many thousands of injuries. Aside from the enormous human cost of these accidents, the economic costs to workers, businesses and the wider economy are substantial and ensure that there is a strong case for businesses to take workplace safety seriously.

These incidents are preventable, and thankfully have been falling for several decades thanks in part to the UK's world-leading occupational health and safety regulatory regime, in which robust principles-led legislation sits atop more detailed regulations and is backed by a single, strong enforcement agency and owned by a single Government department. As well as a moral duty and these legal responsibilities, there is a strong business case for improving health and safety at work; RoSPA has spent decades supporting businesses in this space and recognises achievement in the sector through our annual RoSPA Health and Safety Awards. However, as we outline below, there is no room to be complacent, as issues remain and a host of emerging challenges present new problems for workers' safety.

The business case for workplace health and safety

In difficult economic times, the business case for investing time and money in health and safety at work may not always seem obvious. But, aside from the human tragedies at their heart, workplace accidents are costly – not only for UK economic output, but also for businesses.[1]

Despite improvements, there are more than half a million non-fatal injuries to workers annually.[2] Many thousands are still dying prematurely as a result of conditions such as occupational cancer.

No business wants its people to be injured, nor does it wish to be prosecuted, served with enforcement notices by inspectors, or subjected to the reputational harm that would follow serious breaches of the law. But when it comes to investing in health and safety, it is not just a case of doing the right thing, avoiding reputational damage or complying with regulations; it is underpinned by a very strong business case. Furthermore, although it might seem wholly counter-intuitive, that case is even stronger when times are tough than it is at other times.

The reason is very simple: accidents and ill health caused by work impose massive – but largely unrecognised – costs on businesses:

- The Health and Safety Executive (HSE) has estimated that the ratio between insured and uninsured costs arising from accidents lies in the range of 1:8 to 1:36. So in the worst case, for every £100 recovered from the insurer, the business loses about £3,600[3]
- In the case of a very severe accident, such as a fire or loss of a key worker in a small firm, such an event could spell the end of the business altogether

- Work-related accidents led to 3.7 million lost working days in 2022/3,[4] and resulted in a combined cost to the UK of £7.7bn including lost output in the billions.[5] There were 37% more days lost to accidents at work than to strikes in 2023.[6]
- Work-related ill health (conditions caused or worsened by work), including musculoskeletal disorders, stress and depression, led to over 31m lost working days in 2022/3.[7]
- There are other adverse consequences to think about too, such as loss of workforce morale (serious injuries can have a depressing effect on teams) and loss of corporate reputation.

During an economic downturn, when the options for improving the bottom line through increased sales and turnover can be very limited, investing in loss control becomes even more important.

Investing in health and safety is therefore not only vital to drive up growth and boost productivity, it is essential for healthy and sustainable business. As an old adage goes, 'Good health and safety is good business'.

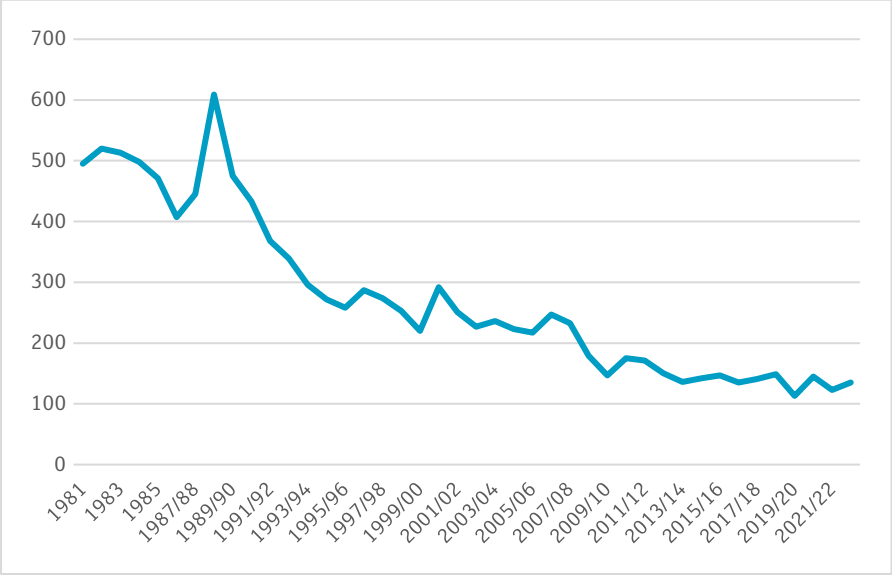
A world-leading regime

Safety at work has improved dramatically over the last century. It is the UK's health and safety success story. Successive waves of regulations, culminating in the world-leading and much-emulated Health and Safety at Work etc. Act 1974 (HSWA) have made the UK one of the safest places to work in the world.

In the early 20th century, there were often at least 4,000 workplace fatalities annually – in a much smaller workforce than today's.[8] As safety regulations became more widespread and stricter, this fell over the course of the century, but numbers still remained high – with failures in the regime epitomised by incidents like the Nypro chemical plant explosion in Flixborough in 1974 which killed 28 and injured many more. The introduction of the HSWA has helped to close those gaps and drive down serious workplace injuries. Since 1974, annual workplace fatalities have fallen from 651 to 138 in 2023/4, a reduction of 79%.[9]

Figure 25: Work-related fatalities in Great Britain, 1981 to 2022/23

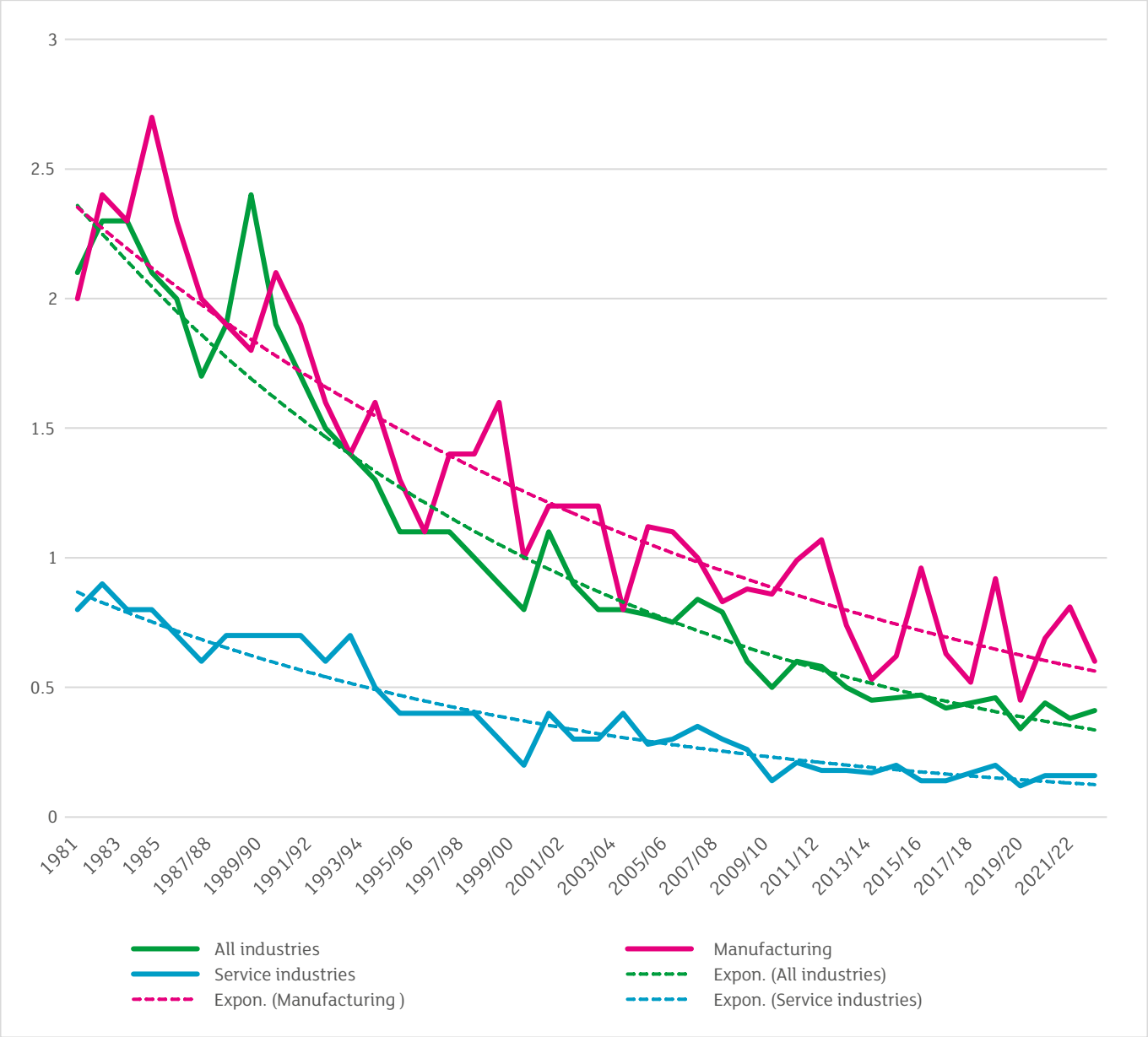
Source: Appendix 4, Table 1



There is no doubt that some of this reduction is associated with the UK's deindustrialisation, as a large amount of the UK's heavy industry has been replaced by the service sector. However, official statistics reveal that the *rate* of accidents has fallen in most industries (see Figure 26). The fatal injury rate in manufacturing has dropped by 70% since 1981, and by 75% in both construction and the service sector. Across all industries, the rate has fallen by over 80%. So, even if the UK still had a manufacturing sector proportionally the same size as it had in 1981, the number of accidents would still be far lower thanks to the improvements in health and safety that have taken place since then.

Figure 26: Rate of fatal injury per 100,000 workers, by industry: all industries, services and manufacturing, 1981 to 2022/23

Source: Appendix 4, Table 2



Unsurprisingly, the HSWA is widely recognised as a successful piece of legislation for its clarity, universal coverage, and its principles-oriented approach. It provides lessons for what good health and safety legislation looks like.

Before 1974, the UK's regime was a complex patchwork of prescriptive rules (contained in over 500 statutory instruments), enforced by seven inspectorates and five Government departments. Many industries were heavily regulated by rigid rules which stipulated how specific scenarios were to be safely managed; yet, many areas of work were untouched by regulation at all, especially the growing service sector. And it was clear that, despite the rigidity of the regulations, they were still not always fit for purpose, prompting the Government to appoint Lord Robens to review occupational health and safety. His proposals, published in 1972, laid the foundations for the 1974 Act, which brought OSH legislation into one place, with clarity of purpose, broad scope, and a flexible system of goals and principles based on the notion that employers have a duty to ensure their employees' wellbeing and safety.[10] It also set up a single powerful, independent regulator (HSE) and made it challenging to defend against prosecutions, requiring employers and those who create the risk to prevent accidents proactively rather than wait to act after one happens.

There is valid criticism of some aspects of the HSWA 1974, but its successes have led to it being the model used around the world for occupational safety and health regimes. It is truly world-leading.

'In my 41 years of international and European work in this field, I can say with confidence that usually the first point of reference is the British experience, the HSE website, British research, British solutions and practices.' – Dr Jukka Takala, former Director, EU-OSHA[11]

Stalling progress, heavy costs

Nevertheless, there is still much to do. In 2023/4, 138 people were killed at work in Great Britain, while 60,645 injuries to employees were reported to HSE; the Labour Force Survey reveals that this only scratches the surface of the scale of workplace incidents, as it estimated that 561,000 working people sustained an injury at work.[12] Some industries, like agriculture and construction, have a high rate of fatal and non-fatal worker injuries. 37% of workplace fatalities occurred in construction in 2023/4, while a further 17% took place in agriculture, forestry and fisheries; 11% were in manufacturing.[13] Agriculture, forestry and fisheries also have the highest rate of self-reported, non-fatal workplace injuries, at 3.7 per 100 workers, with construction having the second-highest rate, at 2.6 per 100 workers.[14] Thankfully, the rate of fatal injuries has fallen sharply in construction over the last 50 years, but in agriculture is has remained stubbornly high.[15]

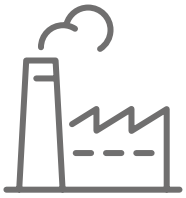
Most fatal workplace accidents occur in...

Construction

37%

17%
Agriculture, Forestry and Fisheries

Manufacturing

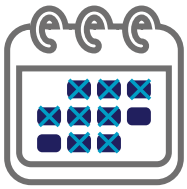


11%

While it is unsurprising that these labour-intensive sectors account for the highest fatality and injury rates, and it is true that professional industries record the lowest non-fatal injury rates, this should not obscure the fact that many other sectors have relatively high non-fatal injury rates. For instance, the rate of self-reported, non-fatal workplace injuries is higher in administrative and support services, retail, transportation and accommodation/food services than in manufacturing.[16]

All in all, these figures point to persistent issues, and the lack of progress in agriculture suggests that there is much more still to do. One of the biggest dangers now is complacency. The impact of these injuries is huge. In personal terms, it can be devastating as workers are left coping with serious injuries – sometimes enough to take them out of work completely – and the families of workers killed doing their job are left to pick up the pieces, grieving as their loved one died in a preventable accident. There is a financial cost to this too. Most of this (around 60% – £12.2bn in total) is borne by the victim.[17] But, for the wider economy, the result is 3.7m lost working days due to workplace injuries, with each person injured at work taking an average of 6.6 days off work to recover.[18]

561,000
people injured at work every year in Great Britain



3.7m
lost working days anually

£7.7bn
cost of workplace injuries

Clearly, there is much left to do – and the rate of fatality reduction is stalling. Over the decade 2013/4 to 2022/3, there was almost no change in the number of workplace fatalities. By contrast, they fell by over 36% in the previous decade.[19]

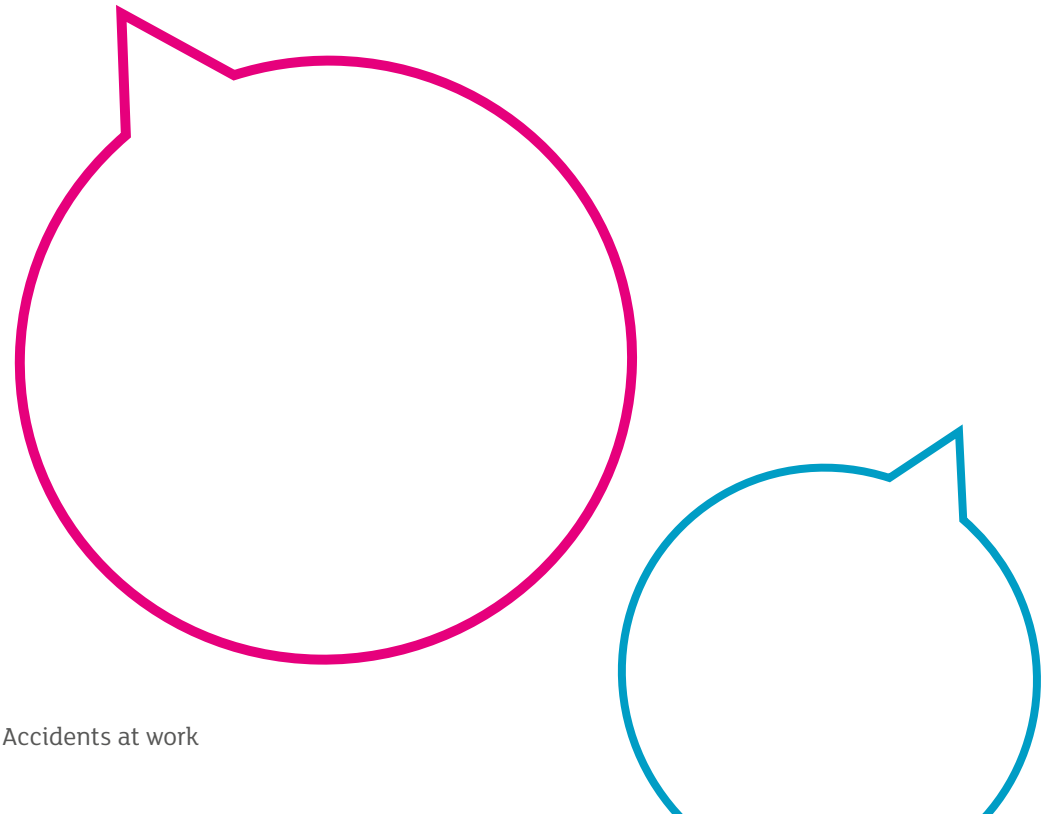
Against this backdrop, we are concerned that the Health and Safety Executive has suffered a 45% real-terms budget cut since 2009/10,[20] making it harder for HSE to enforce the HSWA 1974 and investigate serious workplace accidents. This could feasibly lead to an inability to deliver advisory and regulatory functions and justice for victims.

We urge the Government to address the ticking timebomb of workplace injury and ill-health by raising its investment in the HSE so it can effectively protect lives, livelihoods, and Britain's businesses. Only then can the UK retain its status as a beacon of health and safety.

Policy recommendation

- Government must increase real-terms investment in HSE to empower it to increase its capacity to deliver on its enforcement, investigative and advisory duties

Beyond these continuing problems, there are also new challenges emerging for the world of work. These include the gig economy, loss of skills from the workforce, changes in driving to work patterns, the increasing importance of mental health, and the growing diversity of the workforce. Each of these require specific policy interventions, but it is worth remembering that they can only be implemented effectively if HSE is well-resourced. If we can't stop old accidents happening with the resource we have, how can we expect the HSE to effectively tackle these emerging risks? This underlines the need for Government to take a holistic, strategic approach and provide greater funding for regulators.



Emerging challenges

Gig economy

For decades, most UK workers were either employed or self-employed. Employed people were paid either wages for the hours worked or salaries. However, the 'gig economy' has emerged, where workers are paid on the completion of a task, not for the time they have worked.[21] This model has become widespread in service-sector roles like taxi driving, delivery work, personal services, proofreading, designing, data entry and in some elements of IT. The internet, especially app-based services, has fuelled a sharp rise in this type of work, and some definitions of the 'gig economy' explicitly link it to services provided through online platforms which connect consumers with service providers.[22]

It is very difficult to estimate how many people work in this way, owing to the flexible and casual nature of the work and definitional and methodological differences between studies. The Government's own investigation in 2018 suggested that over 4% of workers (2.8m people) had worked in the gig economy in the prior 12 months.[23] A University of Hertfordshire and Trade Union Congress (TUC) study suggested that between 2016 and 2019 the proportion rose from 4.7% to 9.6%, suggesting over 5 million workers.[24] In 2021, another TUC study found that almost 15% of workers were in 'gig' jobs,[25] though a more recent study by the Chartered Institute of Personnel and Development (CIPD), which represents HR professionals, found that only 1.4% of workers were in the gig economy – around half a million.[26] Regardless, hundreds of thousands, quite probably more than a million, of UK workers are doing 'gig' jobs.

These workers are not a homogenous group. One study found that over 70% of respondents were using gig work to 'top up' earnings from other jobs, with 48% being in full-time employment. It is, therefore, often a 'side hustle'. Additionally, 76% of those doing gig work also use gig platforms as consumers.[27]

For many of these workers, the flexibility of the gig economy helps them to manage this work around other commitments. Nevertheless, the flip side of this flexibility is precarity and low pay. In 2023, over half of gig economy workers were earning less than minimum wage, and most of them were working long days, enduring stress and tiredness. Given that many are also driving or riding for this work, this opens up concerns around health and safety.[28]

The status of gig economy workers is also complex. In 2021, the Supreme Court ruled that Uber drivers should have worker status. HSE has said that gig economy workers should be treated as workers for the purposes of health and safety, and in 2022 it changed the PPE regulations to put a duty on all employers to provide suitable PPE for all workers, including those under a contract for service (previously the requirement was only for those with an employment contract).[29] Nevertheless, given the precarious nature of the work, gig workers' tenuous rights and protections, and concerns around overworking, more needs to be done to protect these workers.

We are calling on the Government to conduct a study into this section of the economy. It should not be the case that we have such wildly varying estimates of the workforce – we must understand the scale of this sector and the conditions of those working in it. This should be used to propose policy interventions aimed at reducing accidents resulting from suboptimal working conditions or overworking.

We join the Institution of Occupational Safety and Health (IOSH) in calling for Government to mandate that all 'gig' workers are eligible for compensation for work-related accidents and occupational diseases, and are afforded the right to good conditions, a minimum wage and union representation.[30]

We are concerned that the UK has not ratified 39 of the International Labour Organisation's conventions, including many on worker safety. As a starting point, the UK must ratify the foundational Occupational Safety and Health Convention, 1981 (No. 155) and the Safe and Healthy Working Environment (Consequential Amendments) Convention, 2023 (No. 191), the latter of which gives all workers the right to a safe and healthy workplace. This would enshrine these core principles into the UK's health and safety law and help to protect all workers, including 'gig' economy workers and other workers on casual contracts.[31]

Policy recommendation

- Conduct a study assessing the scale and nature of the 'gig' economy and the conditions of its workers; use this to inform a strategic approach to health and safety
- Ensure that all 'gig' workers are eligible for compensation for work-related accidents and occupational diseases
- Give 'gig' workers the right to good working conditions, a minimum wage and union representation
- Ratify International Labour Organisation conventions aimed at protecting workers' safety, including the 1981 Occupational Safety and Health Convention (No. 155) and the 2023 Safe and Healthy Working Environment Convention (No.191).

Driving or riding for work

Driving is the most dangerous work activity that most people do, and it contributes to far more work-related accidental deaths and serious injuries than all other work activities.[32] Most organisations require at least some staff to use the road network for work, while many people work on the roads themselves as maintenance workers, emergency service operatives, refuse collectors and vehicle breakdown attendees.

HSE estimates that as many as a quarter of all road traffic incidents may involve someone driving for work. Analysis of official data from the 2010s showed that almost a third of all road deaths (at that time, over 500 people) involved people driving for work. Over 5,000 people were also seriously injured on the roads annually by collisions involving people driving for work.[33] Thus, although direct work-related fatalities have fallen, many people are still being killed on the road by people driving for work (including employees themselves).

However, under current reporting rules, driving-related incidents occurring on a road do not usually need to be reported to HSE under RIDDOR (The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013).[34] As the HSE Network have noted, this contributes to the sense that 'driving safety … is often not thought of a huge amount as incidents often do not occur within the confines of a physical workspace'.[35] The lack of reporting in this way can make it difficult to assess how many people are killed on the roads while driving for work, let alone whether there are any patterns or trends that could help guide interventions. Employers may also have a limited view of how to improve driver safety as a result.[36]

We are therefore calling on Government to:

Policy recommendation

- Make work-related driving incidents RIDDOR reportable.

The emergence of the gig economy has also had unknown effects on road incidents. Government must understand the rate of incidents among gig workers. But given that many gig economy workers are riding or driving for their 'gigs', Government must understand this risk, ensure that workers are fully covered by the HSWA, and address any potential gaps in health and safety protections while driving or riding for work.

Policy recommendation

- Government needs to understand road collision rates among gig economy drivers.
- Government should assess protections on gig economy workers to ensure that they are covered by health and safety regulations while riding or driving for work.

Commuting remains overlooked in workplace health and safety. If someone is travelling to their work, but not 'on the clock', any incidents they are involved in on the road are not usually RIDDOR-reportable and employers generally do not have a duty to manage their safety. This is concerning as the Covid-19 pandemic has changed how people work and travel to work. For white-collar workers, there are many new opportunities to work from home which has allowed people to move further from their employers' office for various reasons, and often change their 'normal place of work'. Nevertheless, most people do not work *entirely* from home and still commute to a physical office, in-person meetings or other work-related events; even if this means travelling less frequently, it can still mean that they have to travel further afield when they do drive. We want to see employers taking a holistic view of their employees' days, including commuting time, especially to avoid issues around driving tired.

Indeed, driving tired is a major issue and often affects workers. It is not surprising that many people driving for work will be under pressure to meet deadlines or eager to get to and from their place of work (or work location on that day) in the least amount of time, especially in the 'gig' economy. It's also the case that many drivers will be tired after a long day of work, and the risks of driving drowsy are high. There are also many work drivers, especially in the 'gig' economy, who drive at night. Some estimates suggest that up to 20% of all road fatalities are a result of fatigue. Those most at risk are young male drivers, company car drivers, truck drivers and shift workers.[37]

We want to raise awareness of this issue and see the conversation change, so that people think of driving drowsy in a similar way than they would think about driving drunk. Some studies have shown that being tired can impair driving in a way that is similar to being under the influence of alcohol; for instance, being awake for 18 hours has similar effects on reaction time and hand-eye coordination as having a blood alcohol content of 0.05% (the legal blood alcohol limit in Scotland), and this rises to 0.08% after 20 hours of being awake (the legal blood alcohol limit for driving in England, Northern Ireland and Wales).[38] Finally, we endorse the Society for Occupational Medicine's call for organisations to consider shift planning to avoid fatigue where possible, offer night worker assessments where possible, recognise how shift work and long hours may impact on drivers with long-term health conditions, and offer overnight stays, where practicable.[39]

Policy recommendation

- Target campaigns aimed at both employers and those likely to drive drowsy, incorporating working with stakeholders to manage the risk factors
- Encourage employers to support workers who drive, for instance through improved shift planning, night worker assessments, and offering overnight stays.

Health and safety skills in a dynamic workforce

The UK workforce is becoming increasingly dynamic as the concept of a 'job for life' gives way to multiple careers for millennials and members of Generation Z. Studies suggest that most of the latter consider 'job-hopping' a vital strategy for getting ahead,[40] and it is expected that those at the beginning of their working lives now will likely have many jobs and several career changes over the course of their working lives.[41]

While this provides many upsides to the economy, the loss of both core and specialist health and safety knowledge that comes with an increasingly mobile workforce presents real challenges. While, on a surface level, the role of a delivery driver is the same across differing industries, the skills required to safely transport glazing are very different to transporting livestock. Traditionally, where people stayed in the same industry, or even the same role for their entire career, this was less of an issue, but it presents added challenges amid rising job turnover rates and increased career-switching.

A pan-industry approach to this emerging skills shortage which will upskill sector-agnostic workers in transferable health and safety fundamentals would support workers to transition between industries safely. Sector Skills Councils are ideally placed to lead the development of 'generic', 'sector-specific' and 'best practice' health and safety tools to support our changing workforce.

Policy recommendation

- Sector Skills Councils to establish transferable health and safety 'fundamentals' qualifications, tools, and funding.

Mental health

In England, one in four adults experiences at least one diagnosable mental health problem annually, with depression and anxiety being the most common mental illnesses among adults.[42] While these issues are not in themselves new, incidence of mental illness among adults is rising. The NHS's 2014 Mental Health and Wellbeing in England survey found that 1 in 6 adults had experienced a common mental health problem in the week prior to the survey. This rate had steadily risen since the first survey in 1993; as the survey takes place every seven years and was delayed due to Covid-19, there is no comparable more recent data,[43] but it seems very likely that it will have continued to rise. The pandemic in particular had acute effects, with some charities reporting a sharp increase in demand for advice.[44]

The rising incidence of mental ill health is of particular concern to businesses and workers. The 2014 survey showed that, among adults, the age cohorts with the highest rates of mental ill health are those of working age, with incidence rates among the over 65s being almost half those in younger adults.[45] Stress, depression and anxiety are cited by workers as a serious problem impacting their jobs. The three conditions accounted for 49% of long-standing work-related health issues in 2022/23. Combined, work-related stress, depression or anxiety occurs in about 3% of workers annually, resulting in over 17 million lost working days, costing over £177bn.[46] This rate has been rising. It had already gone up by around 30% in the five years to 2018/19, but has gone up by 40% again since then.[47]

Workplace stress and poor management can exacerbate this situation. For instance, the Chartered Institute of Personnel and Development (CIPD) found that, of workers who scored their line manager's people management skills in the bottom 25%, half also reported that their work had a negative impact on their mental health, which is 3.5 times the rate among people who classified their line manager's people skills as in the top quartile.[48] Another CIPD paper reported that only 44% of businesses provide training for line managers to support mental ill health among employees.[49]

Under health and safety law, employers have a legal duty to protect workers which includes from work-related stress by identifying hazards and risks and taking action around work-related stress and mental ill health and reduce them where practically possible, but if managers are not trained to idenfiy these risks as part of their risk assessment process, or to spot issues, signs and symptoms or support staff, then this leaves open the question of how effective risk reduction will be in practice. And, all of this needs to be led from the top of the organisation.

There is also a need to improve the level of access which employees have to suitable occupational health services and support. While this is well developed in many businesses, many workers, particularly those in many SMEs, still do not have access to a suitably trained or empowered occupational health professional.

A future National Accident Prevention Strategy should therefore recognise these trends, because although work-related mental illness is not necessarily directly related to workplace accidents, (a) accidents can trigger or worsen mental illness; and (b) any strategy encompassing workplace health and safety needs to address mental health due to the legislative and regulatory structures that occupational health and safety exists within.

In light of these issues, we make the following recommendations:

Policy recommendation

- Workers should have universal access to Occupational Health practitioners
- HSE should review its HSE Stress Management Standards and then ensure that they are embedded in the training and continuing professional development of all managers, workers' representatives and health and safety professionals
- HSE should use its powers to require businesses with significant unaddressed stress problems to introduce mental health change programmes under the supervision of outside experts
- Government should develop a national approach to workplace mental health, set targets and support businesses to build the capacity required to address this issue.[50]

Diversity

Over the last 40 years, the UK's workforce has become increasingly diverse. In 1971, only 53% of working-age women were in employment; by 2011, this had risen to 67%. Over the same time, the proportion of working-age men in employment fell from 92% to 67%, with the result that the workforce is more gender balanced,[51] though the proportion varies widely between sectors and occupations.

The UK has also become more ethnically diverse. In 1981, 96% of the population was White, a proportion that has fallen to 83% by 2021/22, while the proportion of Asian or Asian-British people has more than tripled, as has the rate of Black or Black-British people.[52]

Finally, more people are in the workplace with disabilities now than they were in the mid-20th century, and more people are in work for longer as life expectancies and pension policies have changed,[53] so that some organisations now employ four or even five generations.[54]

Rates of participation for these under-represented groups are not evenly distributed between sectors, but in most sectors diversity has increased over the long-term. These and other characteristics intersect in complex ways, further increasing diversity in the workforce.

These changes have important implications for workplace health and safety. As the workplace has become increasingly diverse, it has attracted people with different needs and socioeconomic, physical or mental characteristics. It is the duty of employers to ensure that their workers are safe and that they have done all that is reasonably practical to reduce risk of harm in the workplace. However, there is still much to do in practice. There is good evidence that accident rates vary between demographics. At the same time, practices that were once appropriate for protecting workers may need to be adjusted to address differing needs in a more diverse workforce; for example, in traditionally male-dominated manual industries, women are now entering the workforce in greater numbers but are finding that the PPE they are provided with can be ill-fitting as it is designed to fit an average-sized man. We discuss these issues and the need for inclusivity in accident prevention in more detail in Chapter 10, but at this point we wish to emphasise the need for any National Accident Prevention Strategy to fully account for the increasing diversity of the workplace in the UK.

Policy recommendation

- The National Accident Prevention Strategy must address increasing diversity in the UK's workforce.

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[1] RoSPA, 'Making the Business Case for Health and Safety' (retrieved 2 October 2024).

[2] 561,000 workers received non-fatal injuries in the workplace in 2022/23, according to the Labour Force Survey. See Health and Safety Executive [HSE], 'Non-Fatal Injuries at Work in Great Britain' (retrieved July 2024).

[3] HSE, *The Cost of Accidents at Work*, HSG96 (London, 1997)

[4] HSE, 'Working Days Lost in Great Britain' (retrieved July 2024).

[5] HSE, 'Costs to Britain of Workplace Injuries and New Cases of Work-Related Ill Health – 2021/22' (retrieved July 2024).

[6] ONS, 'LABD: Labour Disputes in the UK', October 2024, Table 1.

[7] HSE, 'Working Days Lost in Great Britain' (retrieved July 2024).

[8] HSE, *Historical Picture Statistics in Great Britain, 2023* (London, 2023), p. 12.

[9] Mike Penning, '40 Years of Protecting British Workers', in *Safety Management* (July 2014), special ed. ('The Act That Changed Our Working Lives'), p. 14; HSE, 'Work-Related Fatal Injuries in Great Britain' (retrieved July 2024).

[10] Judith Hackett, 'A Safety Record Envied around the World', in *Safety Management* (July 2014), special ed. ('The Act That Changed Our Working Lives'), p. 16.

[11] Jukka Takala, 'The Magna Carta of Health and Safety at Work', in *Safety Management* (July 2014), special ed. ('The Act That Changed Our Working Lives'), p. 17.

[12] HSE, 'Work-Related Fatal Injuries in Great Britain' (retrieved July 2024); HSE, 'Non-Fatal Injuries at Work in Great Britain' (retrieved July 2024).

[13] HSE, 'Work-Related Fatal Injuries in Great Britain' (retrieved July 2024).

[14] HSE, 'Industries' (retrieved July 2024).

[15] Appendix 4, Table 2.

[16] HSE, 'Industries' (retrieved July 2024).

[17] HSE, 'Costs to Great Britain of Workplace Injuries and New Cases of Work-Related Ill Health – 2021/22' (retrieved 26 September 2024).

[18] HSE, 'Days Lost' (retrieved 26 September 2024).

[19] Appendix 4, Table 1.

[20] RoSPA, 'We Must Invest in the HSE to Tackle Growing Threats to Worker Safety' (retrieved 26 September 2024).

[21] The UK Government has defined the Gig Economy as 'involving the exchange of labour for money between individuals and companies via digital platforms … on a short-term and payment-by-task basis': Department for Business, Energy and Industrial Strategy [DBEIS], *The Characteristics of Those in the Gig Economy: Final Report* (London, 2018), p. 9.

[22] For instance, Chartered Institute of Personnel Development, *To Gig or Not to Gig? Stories from the Modern Economy* (London, 2017), p. 46.

[23] DBEIS, *The Characteristics of Those in the Gig Economy: Final Report* (London, 2018), p. 5.

[24] Trades Union Congress [TUC], 'UK's Gig Economy Workforce Has Doubled since 2016, TUC and FEPS-Backed Research Shows', 28 June 2019.

[25] TUC, 'Gig Economy Workforce in England and Wales Has Almost Tripled in Last Five Years – New TUC Research', 5 November 2021.

[26] CIPD, 'The True Story of the UK Gig Economy', 12 October 2023.

[27] University of Hertfordshire and TUC, *Platform Work in the UK, 2016-2019* (Hatfield, 2019), pp. 1-2.

[28] Philippa Kelly, 'Half of UK Gig Economy Workers Earn below Minimum Wage, Study Reveals', *The Guardian*, 11 May 2023.
[29] Alex Lloyd, 'Gig Workers and Safety Standards', *IOSH Magazine*, 4 January 2023.
[30] Institution of Occupational Safety and Health [IOSH], 'Safer, Healthier, Happier: Support Businesses', 31 May 2024.
[31] The UK has also not ratified conventions on safety in construction (1988), mines (1995) and agriculture (2001). Though these have less relevance for 'gig' workers, we would urge the UK Government to ratify more of the ILO Conventions.
[32] RoSPA, *Driving for Work: Using Own Vehicles* (Edgbaston, 2018), p. 1.
[33] *Ibid.*
[34] There are a few exceptions, such as when an incident happens on a private road or where it involves loading or unloading or construction work on the road.
[35] HSE Network, 'Why Many Are Calling for Driving at Work Incidents to Be RIDDOR Reportable', 6 July 2020.
[36] For some criticism of not making work-related driving incidents RIDDOR-reportable, see TUC, 'Roads Continue to Kill off the Record', 12 March 2010.
[37] RoSPA, *Road Safety Factsheet* (Edgbaston, 2017), pp. 1-2.
[38] Danielle Pacheco and Anis Rehman, 'Drowsy Driving vs. Drunk Driving: How Similar Are They?', *Sleep Foundation*, 3 November 2023.
[39] Society for Occupational Medicine, *Driving and Occupational Health: An Essential Guide* (2014), p. 5.
[40] Amelia Brand, 'Two-Thirds of Gen Z Believe "Job-Hopping" is Vital for Their Career Growth', *HR Review*, 17 June 2024.
[41] World Economic Forum, 'Having Many Careers Will Be the Norm, Experts Say', 2 May 2023.
[42] RoSPA, 'Managing to Support Good Mental Health' (retrieved 27 September 2024).
[43] Carl Baker and Esme Kirk-Wade, *Mental Health Statistics: Prevalence, Services and Funding in England*, House of Commons Library, no. CBP-06988 (London, 2024), pp. 5-6.
[44] CQC, 'Rising Demand for Mental Health Care', 21 October 2022.
[45] Carl Baker and Esme Kirk-Wade, *Mental Health Statistics: Prevalence, Services and Funding in England*, House of Commons Library, no. CBP-06988 (London, 2024), p. 6.
[46] RoSPA, 'Managing to Support Good Mental Health' (retrieved 27 September 2024); RoSPA, 'Legal Spotlight: Mental Health at Work' (retrieved 27 September 2024).
[47] HSE, *Historical Picture Statistics in Great Britain, 2023* (London, 2023), p. 7.
[48] CIPD, *The Importance of People Management* (London, 2023), p. 11.
[49] CIPD, 'Health and Wellbeing at Work', 26 September 2023.
[50] See the OSH Alliance's call for action: Institution of Occupational Safety and Health, 'Call for Action to Tackle Workplace Mental Health Risks', 8 October 2024.
[51] ONS, 'The Employment Rates for Men and Women Have Changed over Time', archived by The National Archives on 5 January 2016.
[52] For 1981 statistics, see HM Stationery Office, *Ethnicity in the 1991 Census*, vol. 3 (London, 1996), p. 37; for 2021/22 statistics, see: ONS, 'Ethnic Group: Census 2021' (dataset; 28 March 2023); Scottish Government, 'Search the Census' (dataset; retrieved 27 September 2024); and NISRA, 'Census 2021 Main Ethnicity Tables', 22 September 2022.
[53] Centre for Aging Better, 'Almost One Million More Workers Aged 65 and Above since the Millennium, New Analysis Reveals', 30 October 2023.
[54] Institution of Occupational Safety and Health and ARUP, 'The Future of Work', in *Towards a Safe and Healthy Future of Work: Evolution or Revolution* (2024).

Case study

Natalie, NHS administrator. She lives with husband James, 37, a bus driver, and their two dogs in South Wales. She says:

As we drove back from the Isle of Wight the rain was torrential but visibility was decent. James was driving my car and as we turned a corner, I remember skidding and suddenly we were on the opposite side of the road with cars coming towards us. Somehow James managed to turn the wheel but we hurtled down a grassy bank, I thought: 'I'm going to die'.

There was a loud crunch as the car hit a tree. Smoke was coming off the car, the airbags had gone off and I realised I was alive. I couldn't move. I called out to James and seconds later, I heard him speak: 'Yeah, yeah I'm alive'. People dragged me out of the car, worried that it was going to set alight. The rain hit my face as I screamed out in unbearable pain but it was 45 minutes before the paramedics arrived.

In the ambulance I overheard the paramedics say that they had been expecting the 'female to be DOA' – dead on arrival – but that 'she was still with us'. 'I can tell you were wearing a seatbelt,' said one paramedic, 'if you hadn't, you'd have gone through the window and you'd definitely be dead.'

It turned out I was very lucky with my injuries. I had friction burns down my face, nose, chin and abdomen from the airbag and seatbelt. I'd broken six ribs, my right wrist and five bones in my hand. My arm was in a sling for six weeks and my right index finger was badly bent.

I was diagnosed with PTSD as flashbacks would give me a panic attack. They've gradually faded but I am still a terribly nervous passenger. My right index finger remains partially broken and I have a permanently achy lower back which sometimes spasms. I took a fortnight off work but fortunately had sick pay, although I returned to desk duties which were highly challenging, and the car insurance would not pay out as James was driving my car.

CHAPTER 05

Road safety

Road safety[1]

A decade of lost progress, an opportunity for change

The UK rightfully has a good reputation for its road safety. It was an early pioneer of many safety innovations which are now standard practice, including the introduction of driver registration in 1903, the Highway Code in 1931, the MOT test in 1960, progressively stricter seat belt rules from the 1960s, a legal drink driving limit in 1967, and the ban on handheld mobile phone usage while driving in 2003. Initially founded as a road safety organisation in 1917, RoSPA is proud to have been an advocate for many of these improvements and to have supported Government as it brought them into law.

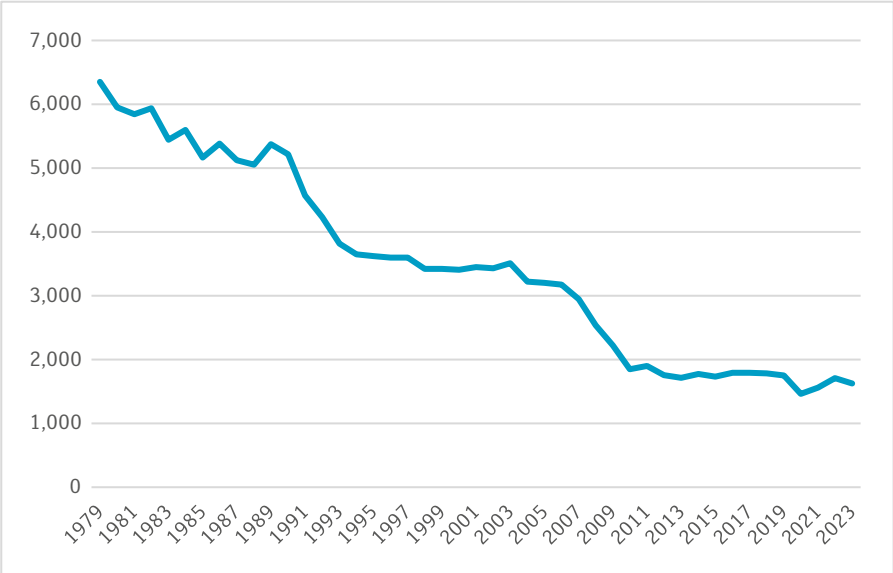
Gradually, these changes – alongside technological improvements in car design and behavioural changes among drivers – mean that road fatalities have fallen sharply since the mass adoption of car ownership in the 1960s. Road fatalities peaked in 1966 at 7,985;[2] this equated to about 74 people killed for every billion vehicle miles travelled that year.[3] As Figure 27 shows, today road deaths sit at 1,624 annual deaths (2023).[4] Because the number of miles travelled annually has roughly trebled, the rate of road fatalities has fallen even faster, by 93%, and is now down to 5 per billion vehicle miles.[5]

This progress is very impressive, but it is important to remember that road traffic incidents are preventable, as demonstrated by the periods of fatality reduction that followed improvements in legislation, technology, funding and enforcement. The 1,624 people who died on the roads in 2023 are 1,624 too many, their lives cut short, leaving loved ones with the trauma of having to grieve for their sudden losses. Today – the day you are reading this – 4 people will die on the road.[6] While the long-term progress has been outstanding, it is important never to be complacent. If we were setting up our transport system today, we would never design in 1,624 deaths a year, 28,087 more people seriously injured and a total of 132,977 injuries of all severities[7]– that would be unacceptable. Just because we've inherited this system doesn't mean that we should accept the status quo as inevitable as well.

Unfortunately, if there is one word to describe the Government's attitude to road safety in the UK over the last decade, it is 'complacency'. As Figure 27 also shows, road fatality figures have been essentially static since 2012, except for a temporary fall during the Covid-19 pandemic. Put into context, the decade from 2014 to 2023 saw a reduction in road fatalities of just 9%; while this is good, it is a marked slowdown in progress compared to the 47% reduction in the previous decade.[8]

Figure 27: Road user deaths, Great Britain, 1979 to 2023

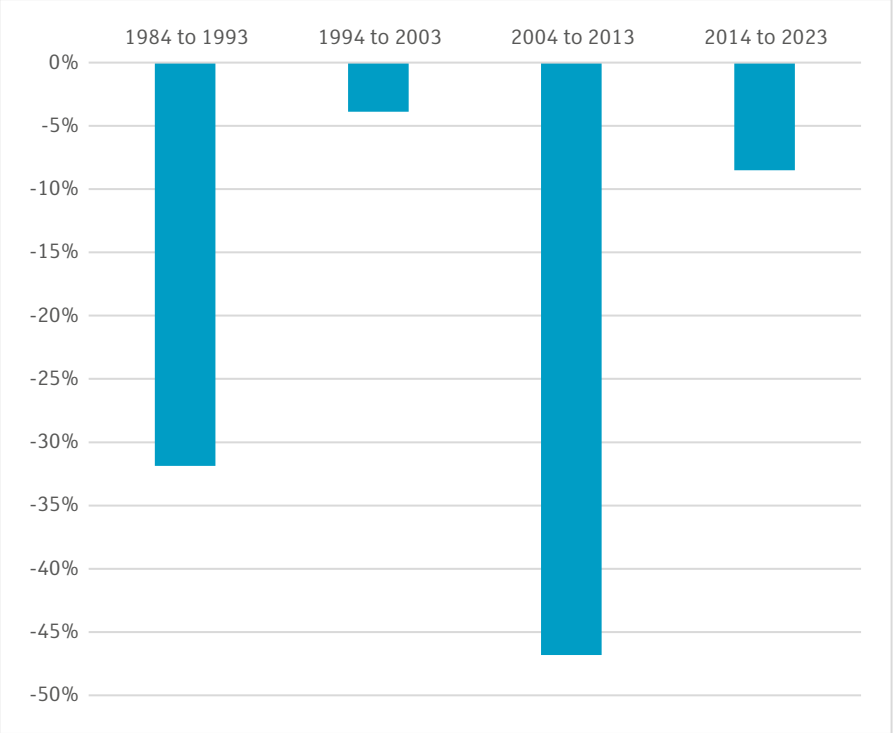
Source: Appendix 4, Table 3



While any progress is a good thing, in retrospect this latest decade looks like a wasted opportunity – a period of stagnation in road safety. Indeed, our European neighbours have mostly outpaced us. The UK's road fatality reduction rate was the seventh-worst in the EU27 across this period.[9]

Figure 28: Changes in road user deaths by decade, Great Britain, 1984 to 2023

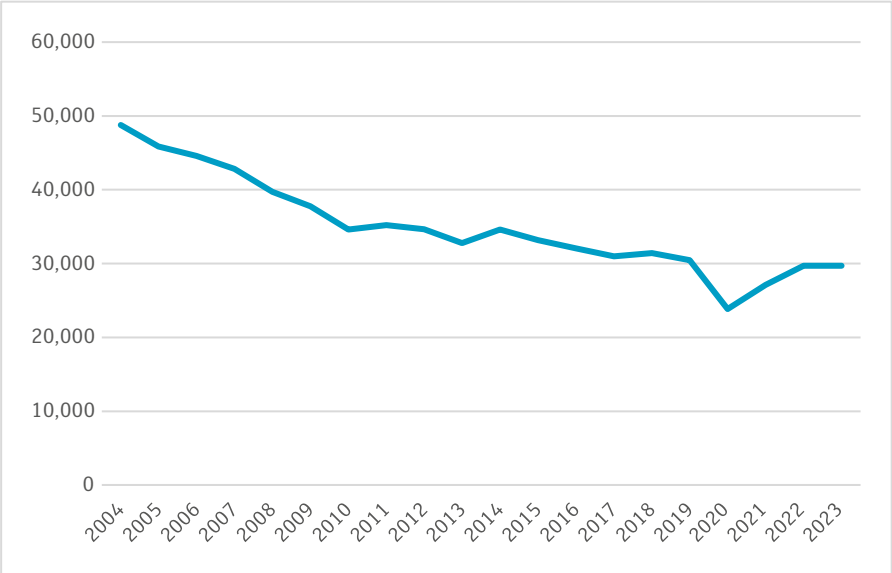
Source: Adapted from Appendix 4, Table 3



When we look at those killed and seriously injured (KSI), there is more improvement over the last decade – but the rate of progress has been slowing. From 2004 to 2013, the annual KSI figure fell by 33%, but from 2014 to 2023, it fell by less than half that (14%). Any progress is good, but this slowdown has cost lives; had the rate of change stayed the same, over 6,000 fewer people would have been killed or seriously injured on the roads last year.[10]

Figure 29: People killed and seriously injured on the roads, Great Britain, 2004 to 2023

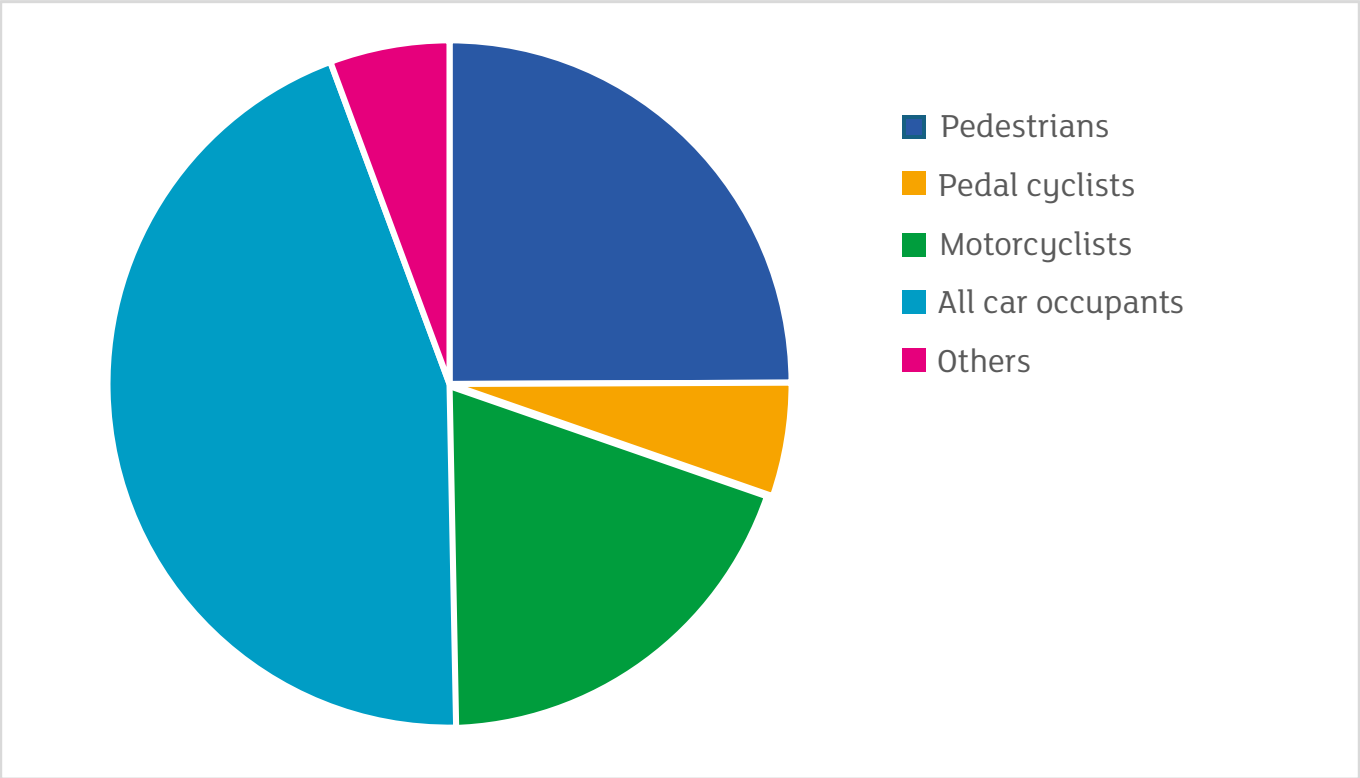
Source: Appendix 4, Table 3



Road fatalities in depth

Figure 30: Road user deaths, by road user type, Great Britain, 2023

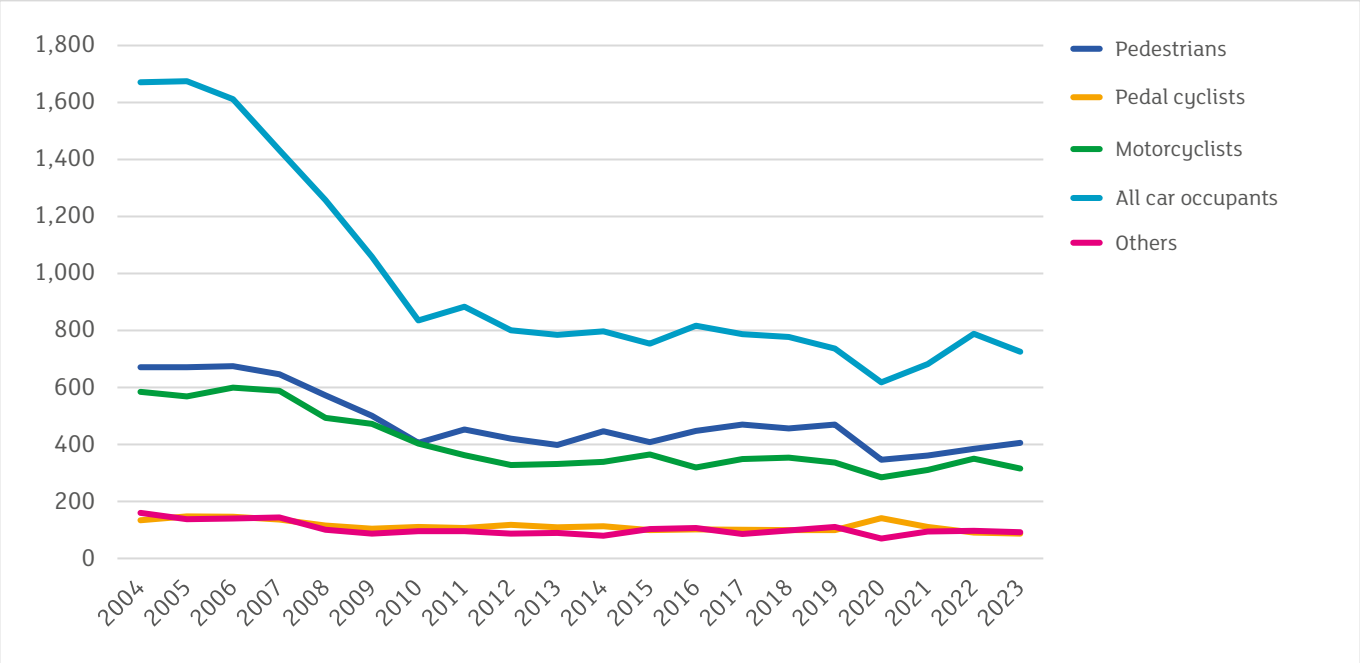
Source: Appendix 4, Table 4



In 2023, 45% of people killed on the road were car users, while motorcyclists and pedestrians accounted for over 19% and 25%, respectively. Viewed historically, we can see that the fall in road fatalities during the late 2000s was driven mostly by a sharp fall in deaths among car users and, to a much lesser degree, by reductions in deaths among pedestrians and motorcyclists. Since 2012, progress has stagnated across all vehicle types and among pedestrians (except for the pandemic years, when fatalities fell among most vehicle users except cyclists).[11]

Figure 31: Road user deaths by road user type, 2004 to 2023 (non-stacked graph)

Source: Appendix 4, Table 4



Certain vehicle types are more dangerous to other road users than they are to their own drivers or passengers, and vice versa. Analysis by the Parliamentary Advisory Council for Transport Safety (PACTS) has shown that cars cause almost as many deaths to other road users as they do their own occupants, whereas cyclists and motorcyclists are very unlikely to kill other road users, and light and heavy goods vehicles and buses cause far more fatalities among other road users than they do their own occupants.[12]

This goes some way to highlighting the vulnerability of certain road users, especially pedestrians, cyclists and motorcyclists. However, when accounting for the number of miles travelled by each road user type, the data paints a different picture. It shows that, relative to the miles travelled, motorcyclists are by far the most vulnerable road user group – with a rate of death several times higher than the next highest vehicle type. Pedestrians and pedal cyclists are at almost equal risk, while the fatality rate for incidents involving cars is very low for both occupants and other road users, even though they cause the highest number of fatalities.[13] It is worth bearing in mind that these rates per mile are not necessarily representative of risk per journey (i.e., by type of trip): people travel much further in cars (and in a shorter space of time) than they do by walking or cycling.[14]

The Department for Transport publishes statistics on factors contributing to fatal road incidents. It shows that the following were the most common road safety factors in 2022:[15]

- Speed (57.7%)
- Behaviour or inexperience (46.8%)
- Distraction or impairment (34.9%)
- Road (12.3%)
- Non-motorised road users (7.5%)
- Vehicles (4.2%).

Next steps

As earlier progress shows, the implementation and enforcement of strategic, evidence-led, sensible policy changes can save thousands of lives and reduce the burden of injuries caused by road collisions. Effective communication can quickly secure public buy-in.

Party politics shouldn't come into this: the new Labour Government can rightly look back to the Blair–Brown years as a time of enormous progress in this area, but it can also cast its eyes back to the Thatcher and Major years, which saw significant reductions too.[16]

Viewed this way, it's clear that the last decade or so of sluggish progress should, if the right policy interventions are made today, be a long and costly blip. It is a reminder that while political decisions can improve collision rates, a lack of initiative can have the opposite effect.

The next Government must act decisively. As part of our call for a National Accident Prevention Strategy, we are calling on the Government to implement the following measures to reduce road fatalities and injuries.

Introduce a Road Safety Strategy for England

Our single most important road safety recommendation to Government is that they introduce a National Road Safety Strategy for England. Today, England is the only one of the UK's constituent nations without a road safety strategy, and its poor progress on road safety over the last decades shows what happens when long-term, joined-up thinking is lacking. In the same way that no major business would exist without a plan or strategy, no major policy area should exist without oversight and strategic direction – especially not when lives are at stake.

To reverse this decade of stagnation, we are calling for Government to adopt a strategy for road safety, backed by:

- A safe-system approach focused on prevention, protection and response
- Evidence-led targets for fatality and injury reduction, supported by a system for tracking progress and guidance for authorities.

Policy recommendation

- Introduce a Road Safety Strategy for England.

Set up a dedicated body to investigate fatal incidents

When an aeroplane or a train are involved in a crash, dedicated investigative branches are brought in to determine the causes and make recommendations to avoid recurrence. But the same has never been true for roads. The police officers attending and investigating serious road collisions do a gallant job, but data collection and reporting will vary between forces and the purpose of a police investigation, which looks to assess criminality, is fundamentally different from one which looks to identify causes and learnings. This means that our picture of what causes collisions can often be limited, especially for non-fatal collisions, and there is no automatic means of making recommendations to authorities to prevent recurrence.

We are therefore calling on Government to introduce a Road Safety Investigation Branch. This was first announced by Government in 2022 but has yet to be set up. It would take an independent, rigorous and consistent approach to understanding causes of collisions, without having to assign blame or support prosecution. Its aim would be to understand why collisions on the road occur and take an evidence-led approach to preventing them recurring by making recommendations for change.

Policy recommendation

- Establish a dedicated body to investigate serious road incidents

Protect and support young drivers through progressive licensing

Among drivers, the fatality rate is 71% higher in under 25s than over 25s, while KSI rates are 64% higher, as Figures 32 and 33 show. Young drivers are not only more likely to be killed or injured on the roads, but are also responsible for many other deaths and serious injuries; in 2022, 4,935 people were killed or seriously injured in collisions involving a young driver.[17]

Inexperience and behaviour play big roles in this trend. The charity Brake report that 1 in 5 drivers are involved in a crash in the first year after they passed their test and over 1,500 young drivers are killed or seriously injured every year in the UK. This can be caused by lack of experience and/or riskier driving behaviour, while evidence from the US suggests that young drivers and their passengers are less likely to wear seatbelts – and become less likely the more passengers are in the car.[18] Mobile phone usage, which is distracting for drivers, is also highest among drivers in the 17 to 24 age bracket, where the rate (49%) is twice the average (25%).[19]

Despite this evidence, once drivers pass their practical and theory driving tests in the UK, they can immediately drive unaccompanied on any public road; there is no probationary system. Many other countries, like Canada, some US states and Australia, have recognised that younger drivers can be supported through a system of Graduated Driver Licensing, which places limits on what younger drivers can do for a period of time after they have passed their test. We are calling for the UK Government to introduce a system of Graduated Driver Licensing, which would allow new drivers to build up experience of driving while reducing their exposure to the riskiest scenarios (such as having multiple passengers in their car or travelling at night (with possible exceptions)). According to the Parliamentary Advisory Council for Transport Safety, there is compelling evidence that this can reduce road fatalities by 20–40%.[20]

Policy recommendation

- Introduce a system of Graduated Driver Licensing in the UK.

Figure 32: Age-specific rate of road fatalities, Great Britain, 2022

Source: Appendix 4, Table 6.1

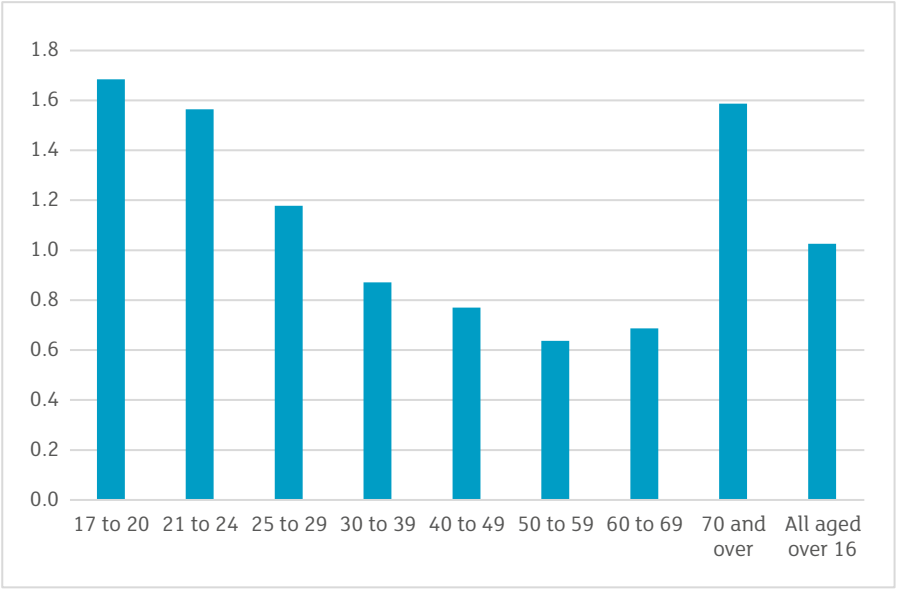
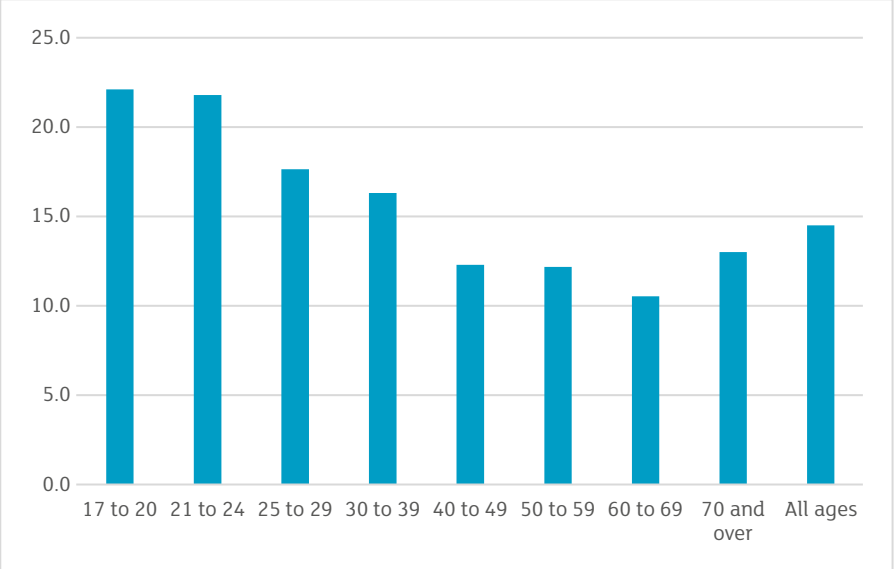


Figure 33: Age-specific rate of people killed and seriously injured on the roads, Great Britain, 2022

Source: Appendix 4, Table 7.1



Adopt the General and Safety Pedestrian Regulations (GSR)

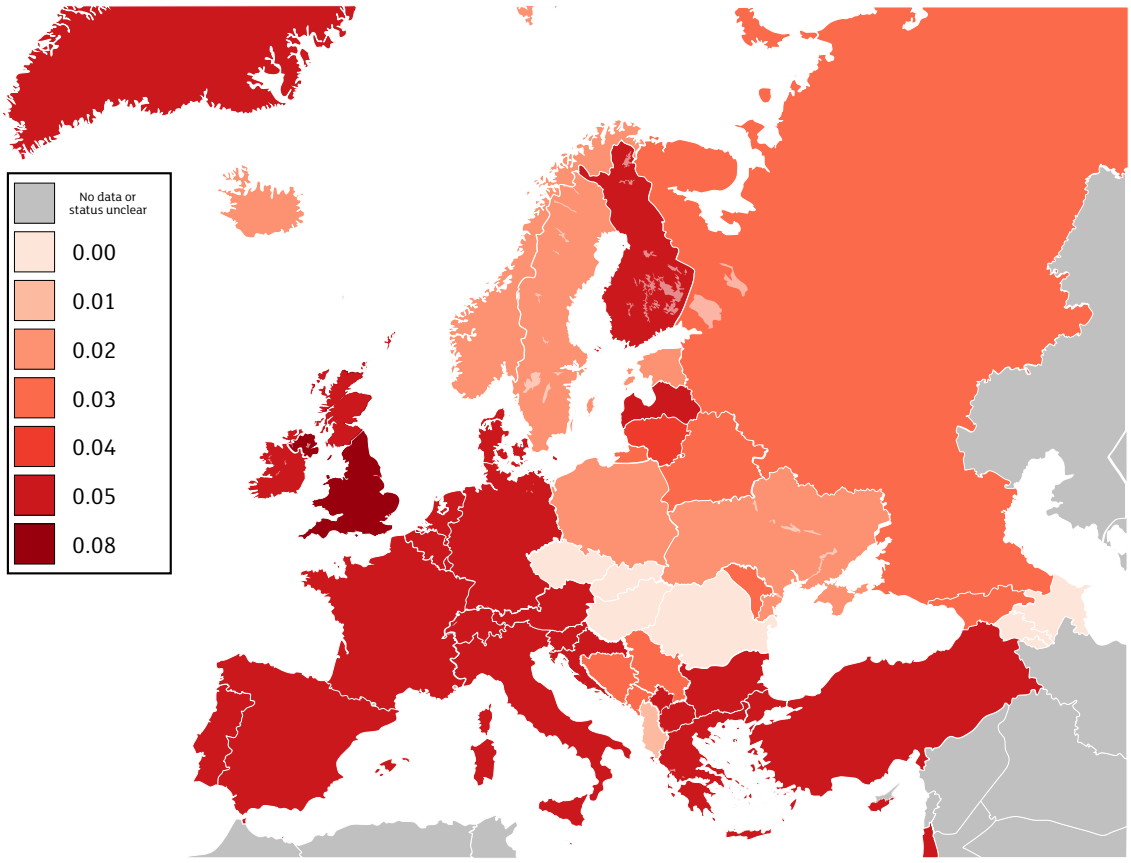
The General and Safety Pedestrian Regulations are vehicle safety rules that are mandatory for all new vehicles approved in the EU and Northern Ireland since 2022 (and all new sales from 7 July 2024). They are world-leading safety rules which make a host of cutting-edge innovations in vehicle safety the norm across Europe. The UK played a key part in the development of the GSR before Brexit. The GSR has now come into force on the continent and in Northern Ireland; however, England, Scotland and Wales have not implemented the rules, creating regulatory divergence within the union while keeping increasingly outdated vehicle safety regulations on our books. We are calling on Government to correct this situation by adopting the world-leading rules that the UK helped to draft: the Government must adopt the GSR without delay. Doing this would cost very little, but would prevent up to 1,762 fatalities in the UK and save the economy £7bn over 16 years.[21]

Policy recommendation

- Adopt the General and Safety Pedestrian Regulations into UK law.

Figure 34: Legal drink-driving limits in Europe: Blood Alcohol Content (mg/100ml)

Source: Tantazul, et al., Wikimedia Commons, licensed under CC BY-SA 2.5



Reduce the legal drink-driving limit

According to official data, 1 in 10 fatal road incidents involve a driver being impaired by alcohol. England, Wales and Northern Ireland have the highest drink-driving threshold in all of Europe, at 0.08mg of alcohol per 100ml of blood (also written as 0.08% Blood Alcohol Content or BAC); the threshold was lowered in Scotland in 2014 to 0.05% BAC.

There is strong evidence that an alcohol blood content at this level already causes significant impairment;[22] drivers who drink up to either limit are 6 times more likely to be killed in a collision.[23] In 2010, the National Institute for Health and Care Excellence estimated that between 77 and 168 lives could be saved annually by reducing the threshold to 0.05% BAC.[24] However, studies suggest that most drivers are still 'significantly impaired' at 0.05% BAC.[25]

We are supporting the British Medical Association's call[26] for the UK Government and devolved administrations to lower the legal blood alcohol content limit for driving to 0.02% BAC for new and commercial drivers, and 0.05% BAC for all other drivers, with the ambition to reach 0.02% BAC for all drivers as soon as possible. We are also supporting the BMA's call for improved enforcement, better testing abilities, public awareness campaigns, increased capacity in alcohol and drug treatment services, and consistent labelling for all alcohol products.

Collectively, these recommendations have received consensus support from not only the BMA, but a wide range of experts, including Brake, the Campaign Against Drink Driving, the Road Safety Foundation, the Royal College of Physicians, Balance, the College of Paramedics and others.

Policy recommendation

- Reduce the legal blood alcohol content limit for drivers to 20mg/100ml for new and commercial drivers, and 50mg/100ml for all drivers immediately, with the ambition to lower the limit for all drivers to 20mg/100ml. This should go hand-in-hand with public awareness campaigns, improved enforcement and testing, and increased support for alcohol and drug treatment services.

Tackling drug driving

Drug driving remains an important problem in the UK, despite strict legal limits coming into force in 2015. Drug-induced impairment contributed to 97 people being killed on the roads in 2022, and a further 926 people being seriously injured. The effects vary by drug, with some reducing reaction times, while others cause drivers to become more erratic and take bigger risks. Drug-driving crash figures have shown no improvement recently and some police forces are reporting increases in convictions.[27]

While the legal limits in force are a good starting point, it is clear that enforcement and behavioural change must go hand-in-hand to tackle this concerning trend. We want to see the following changes:

Policy recommendation

- Increase support for traffic police to help them tackle this issue on the ground
- Employers put in place strict drink and drug-driving policies for staff
- Improved public awareness messaging around the risks of drug-driving.

Empowering local authorities to set safer speed limits

We know that lower speed limits reduce the severity of road collisions, however we also recognise that setting uniform speed limits centrally can lead to measures being put in place which sometimes don't align with local needs or circumstances.

That is why we are calling for Government to empower local authorities to set lower speed limits, especially in built-up areas. A major review by DFT showed that where average speeds reduce by 1mph, collision rates can fall by about 5% (depending on the road type).[28] Other modelling suggests that a reduction from 30mph to 20mph can reduce the probability of collision with a pedestrian or cyclist being fatal by over 80% (from ~78% to ~12%).[29] To put this into perspective, a car travelling at 20mph could stop in time to avoid hitting a child 3 car-lengths in front; but if it was travelling even at 5mph faster, it would still hit the child with an impact akin to falling out of a bedroom window.[30] Unsurprisingly, Public Health England has called for the introduction of 20mph limits and zones in priority areas to reduce unintentional traffic-related injuries to children and young people.[31]

Research in London, where 20mph speeds have been widely adopted, has shown that lowering the speed to 20 mph reduces accelerations and decelerations, creating smoother driving experiences and reducing emissions and wear on brakes. Research has also shown that there is a negligible impact on journey times. It's possible that at night journeys may actually be slightly quicker.[32]

RoSPA is therefore in favour of 20mph zones due to this overwhelmingly positive evidence for them, but we are continuing to monitor 'real-life' effects in parts of the UK, like Wales, where they have been adopted. NAPS should account for real-world results from areas that have rolled out lower limits.

But we also recognise that the most successful safety innovations are often the ones with public buy-in. There is a need to make an evidence-led case to the public for reducing speed limits, especially in built-up areas. There is also a need to ensure that local authorities are empowered to make decisions about lower speed limits in their communities, and that regardless of what limits are implemented, they are effectively enforced and communicated with the public.

Policy recommendation

- Government should empower local authorities to set safe speed limits in their areas, including 20mph limits where appropriate.

Improve the policing and understanding of vehicle defects

Vehicle defects are an underappreciated and probably undercounted factor in road collisions. For instance, tyre defects are recorded as a cause of 2% of deaths and serious injuries on the roads, but it is clear that defective tyres (e.g., those with poor tread depth, pressure or condition) are a much more widespread problem. According to TyreSafe, over 6 million tyres in the UK have illegal tread every year, while DVSA report that over 2 million MOT failures occur annually due to defective tyres (with half being classed as 'dangerous').[33] Poor tyre thread means a car takes longer to slow down when breaking and can lose control easier.[34]

It is likely, given the prevalence of unsafe tyres, that the official 'contributing factors' data may underreport the role of vehicle defects in serious collisions. The creation of a Road Safety Investigation Branch would help to better capture the role that defects play in serious incidents, but this will not reduce the problem in itself. It is already illegal to have unsafe tyres, but public awareness is lacking, so we encourage Government to support a combination of stronger enforcement and better public education around tyre safety and vehicle defects more widely. The National Accident Prevention Strategy, and the Road Safety Strategy, must address these topics.

Policy recommendation

- Improve public understanding of the risks and legal requirements around vehicle defects
- Better investigate the role of vehicle defects in road traffic incidents.

Promoting behavioural change

We have already seen how factors like driving at excessive speed, behavioural issues, and driver distraction are among the most important contributing factors to fatal road incidents, with speed being named in a majority of instances.[35] Drink and drug driving are also implicated in serious accidents, as discussed earlier in this chapter, and driving tired can often have a similar impairment effect as driving under the influence of alcohol (see Chapter 4). Whilst policy interventions and improved enforcement are important to tackling these issues, behavioural change is also crucial.

RoSPA is therefore calling on Government to support campaigns around road user behaviour, including distraction, drink and drug driving, driving drowsy, seat belt wearing, and speeding.

Policy recommendation

- Government should support public awareness campaigns aimed at promoting behavioural change in relation to distraction, seat belt wearing, drink and drug driving, driving drowsy, and speeding.

Safe, healthy and active travel

Healthy and active modes of travel, like walking and cycling, have many benefits. They help people's fitness (and therefore their ability to both avoid and recover from an injury), reduce obesity rates, lower healthcare costs and improve mental health outcomes, while also reducing greenhouse gas emissions. RoSPA strongly encourages active travel for these reasons. However, like everything, they also come with a degree of risk: we saw earlier in this chapter how cyclists and pedestrians are among the most vulnerable road users.

Although they are vulnerable, the degree to which pedestrians and cyclists are killed or injured is contingent on factors like policies, the physical environment they contend with, behaviour of road users, and enforcement. A recent comparison of cyclist fatality data found that the UK had a worse rate of death per mile travelled than many European countries, suggesting that the present level of risk in the UK doesn't have to be so high and can be reduced with the right interventions.[36]

RoSPA's position is that there are multiple ways in which the roads can be made safer for non-motorised users, including by: [37]

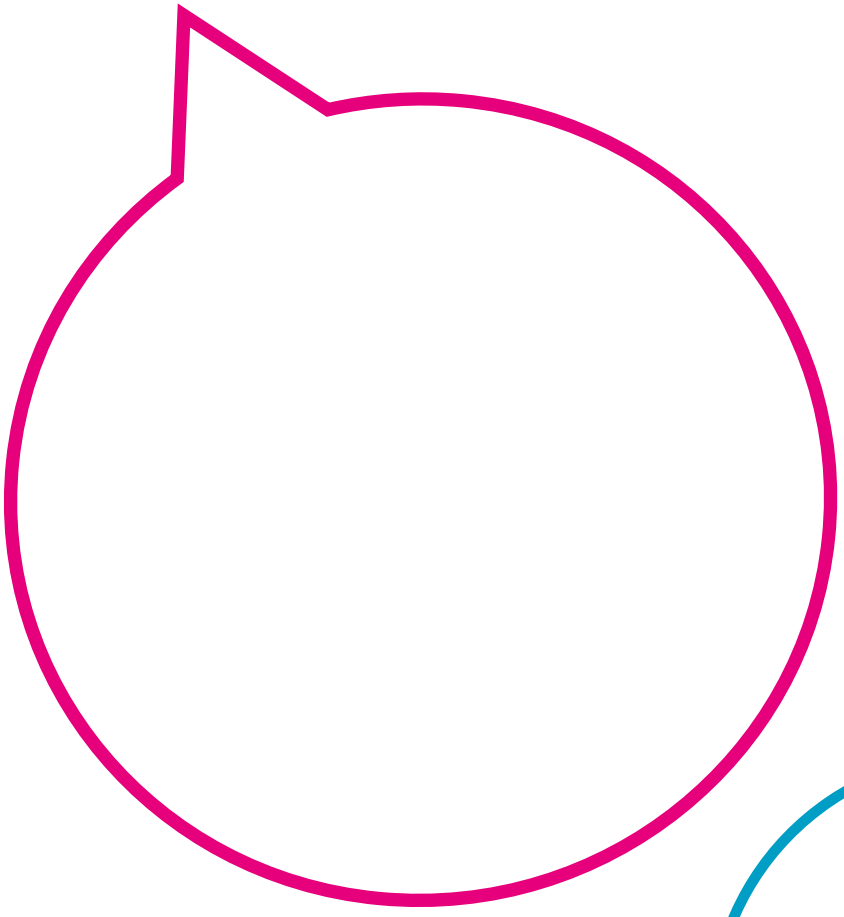
- Improving the physical design of roads to make them safer for non-motorised users, including through the addition of cycle lanes (especially segregated cycle lanes)
- Reducing vehicle speed (as above)
- Creating 'shared space' schemes, which give greater priority to non-motorised road users
- Incorporating measures to support pedestrians with special needs
- Avoiding street clutter and maintaining surfaces to avoid trip hazards
- Improving street lighting, which is particularly beneficial for pedestrians
- Improving driver behaviour through education and enforcement
- Educating children about pedestrian, cycling and road safety.

Additionally, Public Health England has called for schools and local authorities to develop school travel plans which encourage safe and active travel, facilitate safety improvements and support road engineering enhancements (they note that 16 children are killed or seriously injured on the roads every week during peak travel times, with greatest frequency in the hours of 8am to 9am and 3pm to 5pm).[38]

Longer term, we would like to see cycling and walking rates increase, while accident rates fall; implementing these interventions would help to achieve these outcomes.

Policy recommendation

- Government should encourage healthy and active travel, including walking and cycling; local authorities could be involved in raising awareness of the benefits of these modes of travel
- To reduce the rate of incidents, Government should (in addition to empowering local communities to reduce speed limits):
  - support the creation of cycle lanes and shared spaces;
  - support measures to help pedestrians with special needs;
  - improve street lighting;
  - encourage the reduction of street clutter and trip hazards;
  - strengthen enforcement and education around driver behaviour; and
  - ensure all children are taught about pedestrian, cycling and road safety.
- Local authorities and schools should work in partnership to develop school travel plans which support safe and active travel to and from school.



Spotlight on: e-bikes

Electric bicycles, known as 'e-bikes', are an increasingly popular mode of travelling in the UK. They are bicycles fitted with an electric motor that provide assistance when pedalling, with legal limits on the speed and motor power. In English law, people aged 14 and above can ride an e-bike without needing a license, registration, road tax or insurance.[39]

We want to make clear that cycling is increasing because it is an excellent way to get about and provides a wide range of health and environmental benefits. RoSPA encourages cycling, whether on a conventional or electric bike. However, for all of these benefits, there are also risks to using e-bikes. A growing number of collisions around the world are being caused by e-bikes, and this is true in the UK too. In London, for instance, the Metropolitan Police reported 7 casualties involving collisions with e-bikes in 2018, but 64 in 2022; the vast majority of the injuries reported from these incidents were among the riders of the e-bikes (58 out of 64 in 2022), with less than 1 in 10 occurring among pedestrians in 2022.[40] This underscores the emerging risk, in particular to riders (it should be remembered that many minor incidents will not be reported to the police).

It is imperative that Government and public health agencies closely monitor the collision rates and profiles among e-bike riders, and identify any additional risk and mitigating interventions if applicable. We are also aware of e-bikes contributing to street clutter, which can be a hazard, especially for vulnerable pedestrians. We encourage local authorities to work with e-bike and e-scooter providers to mitigate against this emerging problem.

[1] We recognise that the transport safety sector prefers to use the terms 'collision' or 'incident' instead of 'accident', and this is now standard practice. In this chapter, we align with this practice.

[2] Office for National Statistics (ONS) and Department for Transport (DfT), *Reported Road Casualties, Great Britain: 2008: Annual Report* (London, 2009), p. 106

[3] DfT, Road Traffic Estimates, 22 May 2024, TRA0101 dataset. The combined distance travelled across all vehicle types in Great Britain in 1966 was 107.4bn miles.

[4] Appendix 4, Table 3.

[5] DfT, Road Traffic Estimates, 22 May 2024, TRA0101 dataset. In 2023, 330.8bn miles were travelled in Great Britain across all vehicle types.

[6] On average.

[7] See Appendix 4, Table 4; the number of people killed and seriously injured (KSI) on the roads in Great Britain in 2023 was 29,711; subtracting the 1,624 killed in that year gives a total of 28,087 seriously but not fatally injured (under Stats19 reporting procedures, which only records fatalities that occur within a specific time period after a collision takes place).

[8] Appendix 4, Table 3. According to Greenwood, et al., 'After 2003, there was a perception the problem [of road safety in the UK] had been resolved. Road safety lost out to a dominant mobility framing, road deaths were reframed as accidental and so unavoidable, solutions were contested, the politics stream flowed slowly, and from 2011, with the tight fiscal environment, discarded targets, and significant competition for attention from alternative policy areas, policy stasis resulted. The prevailing politics meant that the policy problem remained sidelined and policy solutions continued to be kicked down the road' (see, Ian Greenwood, Samantha Jamson, and Greg Marsden, 'The Changing Politics of Road Death in Britain: From Policy Action to Kicking the Can down the Road', *Transport Policy*, advance issue, published online 21 September 2024).

[9] European Transport Safety Council, 'Relative Change in Road Deaths (%), 2022–2023; 2019–2023; 2013–2023' (retrieved 26 September 2024).

[10] Appendix 4, Table 3.

[11] Appendix 4, Table 4.

[12] Evan Webster and David Davies, *What Kills Most on the Roads?: New Analysis for the New Transport Agenda,* 2nd ed. (London, 2020), p. 12, figure 2.

[13] *Ibid*., p. 13, figure 3.

[14] This point is made by the DfT: 'Official Statistics: Reported Road Casualties, Great Britain: Road User Risk, 2022', 28 September 2023.

[15] DfT, 'Reported Road Casualties, Great Britain, Annual Report: 2023', 26 September 2024, Chart 14.

[16] See Appendix 4, Table 3, for historical fatality statistics.

[17] Parliamentary Advisory Council for Transport Safety, *Manifesto for Road Safety 2024: A Call to Action for the Incoming Government* (London, 2024), p. 4.

[18] Brake, 'Young Drivers' (retrieved 29 May 2024).

[19] The percentage of surveyed drivers admitting to making or receiving voice calls while driving: RAC, 'Using Mobile Phones while Driving – Data, Facts and Figures', 23 April 2024.

[20] Parliamentary Advisory Council for Transport Safety, *Manifesto for Road Safety 2024: A Call to Action for the Incoming Government* (London, 2024), p. 4.

[21] Parliamentary Advisory Council for Transport Safety, *Manifesto for Road Safety 2024: A Call to Action for the Incoming Government* (London, 2024), p. 4.

[22] British Medical Association, 'Evidence to Support the Asks in Our Alcohol, Drugs and Driving Consensus Statement', 5 July 2024.

[23] Brake, 'Drink Driving: The Risks, the Limits and the Penalties' (retrieved September 2024).

[24] Centre for Public Health Excellence NICE, *Review of Effectiveness of Laws Limiting Blood Alcohol Concentration Levels to Reduce Alcohol-Related Road Injuries and Deaths: Final Report* (London, 2010). For modelling, see pp. 9–10;

assuming a similar effect as that found in Australia, 144 lives would be saved; assuming a similar effect as that found in various European countries, modelling indicated that between 77 and 168 deaths could be avoided.

[25] James C. Fell and Robert B. Voas, 'Reducing Illegal Blood Alcohol Limits for Driving: Effects on Traffic Safety', in J. C. Verster, et al., *Drugs, Driving and Traffic Safety* (2009), pp. 415–437.

[26] British Medical Association, Saving Lives: *Reducing Preventable Harm Caused by Driving under the Influence* (London, 2024).

[27] RoSPA, 'Drug Driving' (retrieved 1 October 2024).

[28] M. C. Taylor, D. A. Lynam and A. Baruya, *The Effects of Drivers' Speed on the Frequency of Road Accidents: Prepared for Road Safety Division, Department of the Environment, Transport and the Regions,* Transport Research Laboratory, report 421 (Crowthorne, 2000), p. 2.

[29] Chris Jurewicz, et al., 'Exploration of Vehicle Impact Speed – Injury Severity Relationships for Application in Safer Road Design', *Transportation Research Procedia*, vol. 14 (2016), pp. 4247–4256.

[30] Brake, 'Speed and Injury: How Impact Speed Affects Injury' (retrieved September 2024).

[31] Public Health England, *Reducing Unintentional Injuries on the Roads among Children and Young People under 25 Years* (London, 2018).

[32] Transport for London, 'Lowering Speed Limits: FAQs' (retrieved September 2024).

[33] TyreSafe, 'Home' (retrieved August 2024).

[34] It also causes the engine to work harder, creating more emissions.

[35] DfT, 'Reported Road Casualties, Great Britain, Annual Report: 2023', 26 September 2024, Chart 14.

[36] RoSPA, *RoSPA Policy Paper: Cycling* (Edgbaston, 2023), p. 12.

[37] See, RoSPA, *RoSPA Policy Paper: Cycling* (Edgbaston, 2023) and RoSPA, *RoSPA Pedestrian Safety Policy Paper* (Edgbaston, 2023).

[38] Public Health England, *Reducing Unintentional Injuries on the Roads among Children and Young People under 25 Years* (London, 2018), p. 5. Note: peak travel times are defined as 8am to 9am and 3pm to 7pm.

[39] RoSPA, *Road Safety Factsheet: Electric Bikes* (Edgbaston, 2023).

[40] Metropolitan Police, 'Reported Casualties in Accidents/Collisions involving E-Bikes (Electric Bikes) from 2018 to 2022', June 2022.

CHAPTER 06

Home safety

Home safety

We like to think of our homes as our sanctuaries: our safe places, protecting us from the world. However, most accidental deaths and serious injuries occur in the home. While there is still much to do, decades of increasing regulation have helped to make our workplaces, roads and leisure activities safer than they have ever been. Yet the home remains a dark spot, not just in terms of the huge potential for accidental injuries (we do, on average spend 60% of our time in our homes[1]), but also in terms of safety policy.

When we talk about safety in our homes, it's helpful to divide it up between the fabric of the home itself (its built structure, fittings and maintenance), and how it's used by occupants (products and behaviours). This chapter focuses on the building, and the next chapter on the products we use and the things we do in our homes.

New homes are subject to building control, though they can and should be made safer by design from the outset and there are important issues around the building and fire safety regulatory regime which need addressing promptly. However, the UK has amongst the oldest and coldest housing stock in Europe, the vast majority of which would not stand up to scrutiny if built today. Sometimes they contain dangerous materials like asbestos, as well as unsafe boilers and in-built safety hazards. Following the Grenfell Tower fire, the focus in terms of remediation has so far mostly (and understandably) been on flammable cladding, an acute issue which must be addressed. However, resolving that issue will not mean that the job is done. Other failures in construction may present substantial ongoing risks, including asbestos, RAAC and volatile organic compounds. As with flammable cladding, it is alarming how common these substances are in our homes and buildings.

As most people own their own homes,[2] Government has largely washed its hands of supporting owners to make their homes safer. At the same time, the UK's enlarged private rental sector is poorly regulated, with countless unsafe homes being let, often to the most vulnerable people in society; with limited enforcement and weak regulations, rogue landlords can and often do evade scrutiny, letting out homes that would never be allowed to be built today or rented by social landlords.

Overview

Owing to the way the Government publishes data about deaths, it has not previously been possible to know for certain how many people die due to accidents in the home. However, we have commissioned the ONS to provide a breakdown for us. For the first time, we can now say with confidence that the home is the place where most fatal accidents happen. Strikingly, our analysis found that in England in 2019:[3]

- **55% of all accidental deaths (and 64% of non-transport accidental deaths) were due to an accident in the home** (totalling 7,751 deaths)
- A further 7% occurred in residential institutions, such as care homes
- **54% of fall deaths occurred following an accident in the home,** with a further 14% occurring in residential institutions
- **76% of fatal accidental poisonings occurred in the home**
- 78% of accidental deaths due to heat and hot substances occurred following accidents in the home
- Some types of accident were less likely to happen at home, including accidental drownings; exposure to electric current, radiation or pressure; and accidental injuries caused by people or animals (though at least 20% in each category did occur in the home)

Additionally, hospital data shows that in 2022/3 in England:

- Where the location of accident was recorded, **62% of non-vehicle accident-related hospital admissions were related to accidents that had happened in the home** [4]
- This was over 300,000 admissions – more than the population of Swansea
- This included over 250,000 falls, over 13,000 accidental poisonings, and almost 2,800 dog bites, to name but a few categories of accident
- 53% of all falls resulting in hospitalisation happen in the home.

The home is therefore one of the most dangerous places to be – and, as accident rates rise, this looks likely to get worse.

The post-Grenfell landscape

Since the Grenfell Tower fire in 2017, Government has introduced various reforms to building and fire safety, including the passage of the Building Safety Act 2022, the establishment of a Building Safety Regulator (BSR) and expansion of the scope of the Office for Product Safety and Standards (OPSS). Additionally, Government has been working to implement the recommendations made in the first report of the Grenfell Tower Inquiry. However, despite this progress, work is still underway. There still remain 15 of the inquiry's first set of recommendations to be implemented,[5] and the inquiry's second and final report (published in September 2024) has issued a further 33 recommendations to Government and various other agencies.[6]

The second report highlights several areas which we find particularly concerning and symptomatic of the wider fragmentation of safety policy across Government – a common theme across this report and a core reason for us proposing a National Accident Prevention Strategy. For instance, the report noted that responsibility for 12 aspects of building safety is split between multiple departments and agencies, despite the establishment of the BSR. We endorse the inquiry's recommendation that these be brought under a single regulator. Likewise, its finding that responsibility for fire safety is split between Ministry of Housing, Communities and Local Government (MHCLG), the Home Office and Department for Business and Trade (DBT)

is similarly concerning, and we agree that responsibility should also be brought under a single department. It would be unhelpful to reiterate every one of the 48 outstanding recommendations here, given that they are publicly available in the published inquiry reports, with full justification and the weight of a statutory inquiry behind them; we do not contest any of them and we fully endorse the findings. We call on Government to adopt all of the Grenfell Inquiry's recommendations promptly and in full.

Policy recommendation

- Government must adopt the recommendations of both phases of the Grenfell Tower Inquiry without delay and in full.

Safer by design

There are lots of ways we can make our homes safer, but engineering in safety is one of the best ways to reduce future accidents. The Government must prioritise making homes safer by design.

For new buildings, ways to do this include adopting stricter safety standards relating to stairs (see below), as well as using the recommendations found in RoSPA's 'Safer by Design' framework, which includes a range of building design improvements that go beyond Building Regulations.[7] These include (but are not limited to):

- Adopting safer stairs standard BS-5395-1 in the Building Regulations (see below)
- Mandating step-free external access to the whole plot
- Including two handrails on stairs
- Improving lighting on communal stairs
- Mandating step-free access to the building and balconies
- Potentially wet areas having to have higher slip test certificates (PTV of 27+ in wet conditions)
- Upper floor windows being fitted with a restrictor (for child safety) that can be overcome by adults in the event of an escape
- Making sure glass guarding meets BS EN 12600 2(B)2 classification, and increasing guarding heights on external balconies, roof edges, and internal floors, ramps, stair flights and landings
- Including a lockable bathroom cupboard and a lockable kitchen cupboard, ideally in a high space, to reduce poisoning risks for children and vulnerable people
- Making sure the hob choice and oven position in the kitchen reduce scald risk
- Providing for the addition of stair safety gates, including by building solid areas in walls for the secure mounting of the gates (builders should supply handover information about the location of these areas).

Policy recommendation

- Government to drive up safety in new homes by adopting RoSPA's 'Safer by Design' practices.

Design standards and monitoring

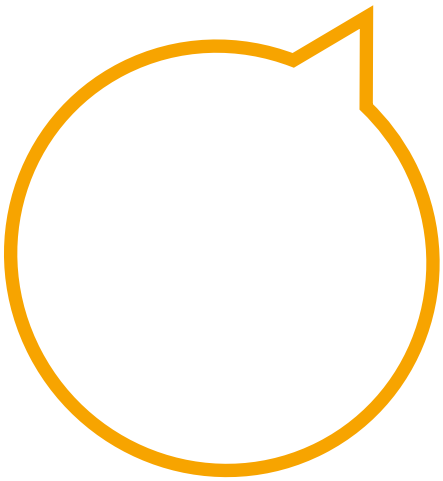
Even with improved safety requirements, ultimately build quality will determine how well-executed safety measures are. Many builders rightly strive to deliver the best quality homes they can, however we are aware of instances of highly variable build quality in some new housing. Sometimes this can result from genuine error, but it has also been linked to the very tight labour market in construction, skills shortages and the highly fragmented nature of the workforce.[8] Defects (so-called 'snagging' problems) and poorly executed designs could embed safety issues into homes.

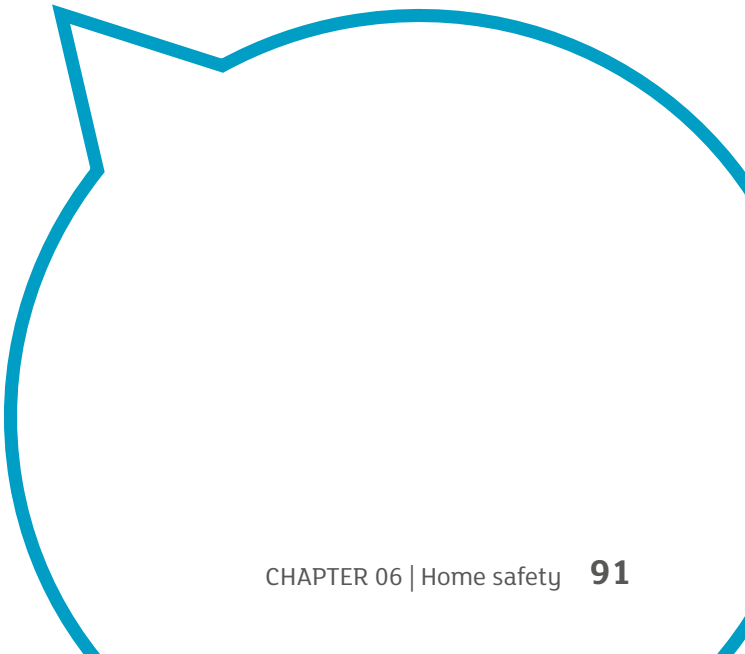
RoSPA would like to see more frequent independent Building Control inspections to assess quality, especially on large developments, rather than rely heavily on self-regulation and self-sign-off. We would also like to see a new Government agency tasked with encouraging and guiding quality in the built environment, akin to the former Commission for Architecture and the Built Environment, which was essentially abolished in 2011 but had previously helped to drive up design standards by offering guidance and advice, and by running public campaigns.

Finally, we take the view that consistency of design helps to reduce the risk of snagging and building flaws. We are therefore calling on Government to explore the use of design codes, which can be tailored by local authorities to meet local needs.

Policy recommendation

- Building Control inspections should become more frequent and more probing
- Government should re-create the Commission for Architecture and the Built Environment
- Government should consult on the introduction of design codes.





Falls and stairs in depth

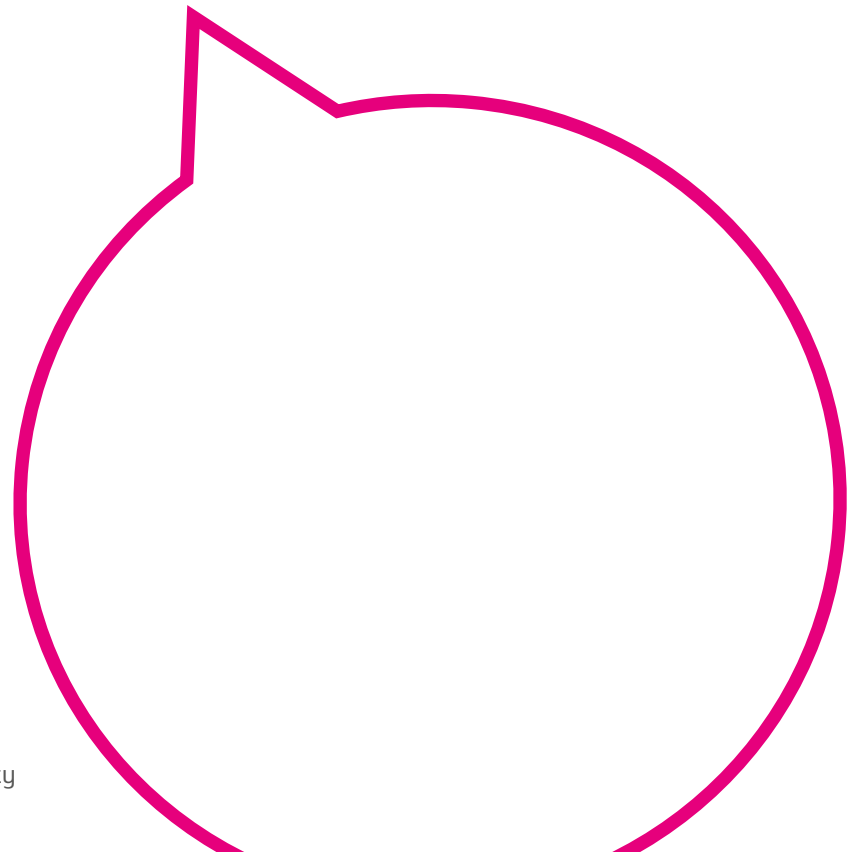
Falls are the biggest single cause of accidental deaths and serious injuries (see Chapter 3). Over half of all falls requiring hospitalisation occur in the home. Any strategic approach to home safety must look to reduce the burden of falls in the home.

Each year, over 700 people are killed and over 43,000 hospitalised due to falls on stairs in the home.[9] Many of these incidents can be avoided by making stairs safer by design. Approved Document K of the Building Regulations (last updated in 2013) includes specifications on stairs for new homes; these are meant to reduce the risk of falls. However, they can be strengthened by adopting British Standard (BS) 5395-1, a technical standard for stairs. It is currently voluntary in the UK, but is estimated to reduce the risk of falls on stairs by up to 60%.[10]

RoSPA has been campaigning for BS 5395-1 to become enshrined in the Building Regulations. Many construction companies support our efforts to raise the bar across their sector through regulatory change. In 2022, we endorsed an amendment to the Building Safety Bill which would have made BS 5395-1 mandatory; Government did not support this, but instead made a commitment to consult on including BS 5395-1 in the Building Regulations. However, at the time of writing, this consultation has not materialised and the standard remains voluntary. We are calling on Government to adopt this life-saving measure now.

Policy recommendation

- Government to incorporate the safer Stairs Standard (BS 5395-1) into the Building Regulations



Retrofitting

Of course, the Building Regulations only apply to new building work. The vast majority of the UK's homes pre-date the current Building Regulations, with only 7% built since 2012; 15% were built before 1900 and 46% between 1930 and 1982.[11] Many of these homes will have a range of elements which would be deemed unsafe if built today, owing to their increased falls risk. Indeed, it is likely that many aspects of these homes would not pass Building Control now.

A National Accident Prevention Strategy cannot ignore this problem, but the scale and complexity of it do present challenges. Solutions could include:

- Government supporting public awareness campaigns around how to reduce the risk of falls in older homes (especially among older and vulnerable adults);
- Government providing advice and resources on retrofitting older homes to make them safer;
- Free or subsidised home safety inspections for older or more vulnerable residents, as well as parents of younger children;
- Subsidies or grants for home improvements (potentially informed by the inspections mentioned above) for the elderly, vulnerable and parents of young children, just as previous Governments have done to support energy efficiency improvements (this should affect the rental sectors as well as the owner-occupied sector); where safety equipment is to be provided, the grant or subsidy must also support the fitting of this equipment as correct installation is crucial;
- Mandating safety inspections on point of purchase of a property, similar to EPC certificates which assess energy efficiency.

There is already a grant to support retrofitting the homes of disabled people, the Disabled Facilities Grant (DFG). As mentioned in Chapter 3, Disabled Facilities Grants are paid by the state to support grand aided housing adaptions for disabled people. Although more has been spent in recent years, and the number of new grants has risen considerably since the early 2000s, recent years have seen the number of new grants fall substantially owing to rising costs.[12] We want to see the DFG better funded to reflect rising costs.

Policy recommendation

- Revise the Disabled Facilities Grant funding strategy to reflect rising building material and labour costs
- Investigate and plan for ways to support retrofitting in older homes to make them safer, potentially using the mechanisms discussed above (we advocate that Government establish a safety equipment scheme providing home hazard assessments, plus provision and fitting of free safety equipment for families with young children who are on a low income, and vulnerable adults and older people; recipients should be taught how to safely use equipment and be offered safety advice; see the Spotlight on Child Safety at the end of this chapter and the discussion on falls in Chapter 3 for more information).

Fire safety

As we saw in Chapter 3, the number of domestic fires in the UK has been falling, but there were still over 32,000 dwelling fires in Great Britain in 2022/3.[13]

We have already described our views around the fire and building safety regulatory regime at the beginning of this chapter, where we made recommendations in relation to the Grenfell Tower Inquiry's reports.

We have several further recommendations to make. It remains concerning, 7 years after the Grenfell Tower disaster, that many thousands of buildings remain in place with dangerous cladding on them. Despite some progress in remediating buildings and creating a framework for doing so, it is alarming to read of buildings remaining with dangerous cladding in-situ despite owners, Government and insurers being aware of the risks to life.[14] The Fire Protection Association recently reported that work to remediate unsafe cladding has begun in only a third of buildings.[15] Frequently, unclear responsibility between owners, lessees and insurers sits behind this inaction – a situation which we deem unacceptable. We are calling for Government to intervene so that unsafe cladding is urgently removed from buildings.

Policy recommendation

- Government must intervene to ensure that cladding remediation occurs swiftly, given the lengthy delays that have already hindered progress.

Here, it is also worth stating that fire detection is of upmost importance, and more could be done to support residents. Thankfully, provision of fire alarms is now a requirement in the rented sector, and uptake of fire alarms among owner-occupiers is high. However, we endorse the National Fire Chief Council's recommendations around fire alarm placement,[16] and we note with interest the regulations that came into force in Scotland in 2022 which require the installation of interlinked fire alarms in every home, and we want the UK and other devolved Governments to consult on rolling out equivalent rules too.[17] We also call on Government to improve public awareness, especially for those in older homes which would not have been fitted with fire alarms when built.

Policy recommendation

- The UK and devolved Governments should consult on improving fire alarm regulations so that interlinked fire alarms become mandated in all homes.

Gas safety

In the UK, 74% of homes use mains gas for their central heating,[18] and millions of others will use it for hot water and cooking as well. Badly fitted and poorly serviced gas appliances can cause gas leaks, explosions, fires, and carbon monoxide poisoning.[19] For this reason, anyone working on gas appliances in the UK needs to be on the Gas Safe Register. However, in 2016 the GSR's own survey found that more than 1 million gas fittings were done illegally – by unregistered persons, including 'over 186,000 gas cookers, 147,000 boilers, 75,000 gas fires, 32,000 gas meters and 645,000 [installations of] gas pipework over one year.'[20] GSR's survey of a sample of illegal jobs found that 60% were deemed unsafe, with 1 in 5 so unsafe that the appliance needed to be immediately disconnected from the gas supply. In the mid-2010s, HSE reported that around 7 people were killed and over 300 injured annually due to gas incidents.[21]

RoSPA is therefore calling on greater public awareness around the need to ensure that gas installation work is done by a properly registered tradesperson, and that regulators are given the full resources they need to carry out enforcement against those carrying out work illegally. It is also important that Government continues to support regulators as the energy market changes over the long term away from using natural gas; long after a potential ban on new gas boiler installations (currently scheduled for 2035), millions of homes will continue to depend on gas for existing boilers and cookers. Finally, as part of a wider set of regulations for the rental sector (see below), we want to see Government ensure that landlords carry out their gas safety obligations; this can be supported by creating a national register of landlords and making it a requirement for gas safety certificates to be uploaded (and accessible to tenants).

Policy recommendation

- Government to better resource, enhance and expand the reach of public awareness campaigning about the need for gas installation work to be done by a properly registered tradesperson
- Government to improve the resources it gives for enforcement against those undertaking gas installation work illegally
- Government should continue to support gas safety regulators in a changing energy market
- Government should create a compulsory national register of landlords (see below) and landlords must submit copies of their up-to-date gas safety certificates to be linked to their entry in the register and to be viewable by the tenants. This would help to ensure that landlords conduct gas safety inspections regularly and that tenants can access the certificates.

Carbon monoxide

Carbon monoxide is a poisonous, flammable, colourless and odourless gas. It is most often produced by partially burning carbon-based fuels (not only gas, but also solid fuels and other carbon-based energy sources). Although it has many uses in industry, it is very harmful to human health. It is also one of the most dangerous indoor air contaminants and one of the most common causes of fatal air poisonings in the world. In the home, it can be produced through damaged, malfunctioning or improperly installed boilers and fuel-burning stoves (as well as other appliances). In England and Wales, around 40 people die due to carbon monoxide poisoning every year, and 224 people were hospitalised due to accidental carbon monoxide poisoning in England in 2021/2, with a further 4,000 attending A&E.[22] A series of measures have helped to reduce fatal events, including greater public awareness, mandatory ventilation in new-build homes, and compulsory carbon monoxide alarms in new homes and socially or privately let buildings.

RoSPA actively encourages the use of carbon monoxide alarms, supports public information campaigns around the risks of carbon monoxide and the benefits of carbon monoxide alarms, and wants to see Government enforce compulsory use in the rented sector more effectively. We would like Government to consult on mandating interlinked carbon monoxide alarms in residential buildings also hope to see Government working closely with groups like the Carbon Monoxide Research Trust to improve research into risks, including in low-level exposures.

Policy recommendation

- Government to support public awareness campaigns about gas and carbon monoxide safety, especially among vulnerable occupants, and it should support research into risks
- As part of a wider package of reforms (see below), Government should use a Private Rented Sector Regulator to better enforce installation and testing of carbon monoxide alarms in homes.

Asbestos

Asbestos is a natural fibrous rock, widely used in the building industry in the 20th century because of its cost-effective, fire-retardant, insulating qualities. It was used especially frequently in the UK in domestic buildings from the 1950s to the 1980s.[23] When disturbed, asbestos breaks into microscopic fibres which are easily airborne. When breathed into the lungs, the body struggles to expel these fibres and they become lodged. Asbestos is a known carcinogen, meaning it can cause cancer, including lung cancer and a cancer of the lining of the lung called mesothelioma; mesothelioma is incurable, has a very poor prognosis, and is almost always caused by asbestos. Even when it does not cause cancer, exposure to large numbers of fibres can irritate and inflame the lungs, causing scarring; one form of this is asbestosis which can be life-limiting. Often, illness occurs years after the exposure took place – in the case of mesothelioma, for many patients it is 30+ years. The risk of developing asbestos-related illness increases with the amount of fibres inhaled, and is worse among smokers, though there is no completely safe level of exposure and mesothelioma in particular can occur with relatively low levels of exposure (compared to asbestosis).[24]

Because of this dose-response link, those with the highest risk of developing asbestos-related illnesses are tradespeople who have been exposed to it by working with it (including those who worked in manufacturing asbestos products, and those who used it in construction like carpenters, builders, plasterers, plumbers, mechanics and shipbuilders).[25] Additionally, relatives of those who have worked with it can get ill through exposure to fibres on their clothes. Being in an environment where asbestos is disturbed or being worked on can also lead to exposure, even if one is not working directly on it oneself.

According to HSE, around 5,000 people die annually due to asbestos exposure.[26] In 2017-19, the average number of new mesothelioma cases in the UK was 2,707, up by 53% since the early 1990s. This is because of the long lag between exposure and onset of illness; most of those who have mesothelioma were exposed when it was still legal to use in the UK. It seems that incidence levels have now peaked, in line with the ban on asbestos use (94% of cases are due to workplace exposures), and will fall by 27% between 2023-25 and 2038-40.[27] Although mesothelioma is still relatively rare and incidence rates are expected to fall, the UK has one of the highest incidence rates in the world; it is thought that this is because of its higher level of use of the more toxic brown and blue asbestos.[28]

In the UK, the import of asbestos was banned in phases, beginning in the 1980s when the most dangerous forms ('blue' and 'brown') were outlawed and culminating in a total ban in 1999 when 'white' asbestos was banned.[29] Before 1999 it is thought that over 6 million tonnes of asbestos were imported into the UK, peaking in the mid-1970s at 195,000 tonnes a year.[30] It was used in thousands of products.[31] Some estimate that 1.5m homes in the UK have asbestos in them,[32] though this may be an undercount given that around 14m homes were built during the period when asbestos was widely used[33]– including over 3m in the 1970s alone, when asbestos imports peaked.[34] Further, any home renovated before the ban could have asbestos in it. Hence, some estimates state that up to half of all homes in the UK may contain asbestos.[35] The fact that we don't know is itself of great concern.

Since the import ban, working with asbestos has been heavily regulated.[36] It has generally been advised that 'where asbestos-containing materials are in good condition and not likely to be damaged they should be left in place and the risk managed', as removing them can release fibres unnecessarily.[37] However, there is growing concern that, 25 years on from the ban, materials are increasingly becoming degraded with time, and are being removed or disturbed through renovation works, sometimes unknowingly.[38] While tradespeople are likely to be alert to the risks of asbestos, homeowners doing DIY renovation may be less aware. We are particularly concerned that the housing crisis has led more and more people to purchase at discounted price older homes in need of renovation, and then do as much of that renovation themselves to keep costs down; this has been particularly prevalent in the 2020s as building costs have soared.[39] The young, first-time buyers and those on lower incomes seem especially likely to do this in order to save money.

As such, many of those who are now renovating older properties may be at risk of exposure to asbestos. There is a good chance that many homeowners will not realise this or understand the risks. In 2010, the British Lung Foundation found that 45% of surveyed home owners did not realise asbestos was used in building materials.[40] Most asbestos-containing materials (ACMs) look like normal products – old vinyl floor tiles, Artex-style coatings, asbestos insulating board (which can look like plasterboard), soffits, cement roof tiles, pipe lagging, old fuse boxes, and insulation. Unless something is glass, raw metal or raw wood, if it was installed before 2000, it could contain asbestos; only testing can determine whether asbestos is present and it is not often possible to know whether a structure contains concealed ACMs until they are exposed and examined. It may only be once work begins that the presence of asbestos is revealed, but if renovators do not know what they are looking for, they may not realise what they are dealing with, nor protect themselves against exposure.

Additionally, damage to homes due to, for instance, flooding, can also cause unintended exposure to asbestos, for instance, through a collapsed ceilings containing asbestos or damage to asbestos floor tiles; the use of fans (in the case of flooding remediation) or non-specialist cleaning equipment like vacuum cleaners, can spread fibres around a home.

Experts describe a 'first wave' of asbestos exposure among those working in the West in mining the mineral or manufacturing products in the early 20th century. The second wave is the one we are in today – those who used products in construction after the 1940s and before the ban in the 1990s. Scholars are concerned that, as those materials are increasingly exposed again through renovation or accidental disturbance, we might be heading towards a future 'third wave' of asbestos-related illness.[41] Regardless of whether we end up with another peak, RoSPA is concerned that millions of Britons could be exposed, unwittingly and often accidentally, to asbestos in their own homes.

We take the view that the existing regulations for handling and working with asbestos are broadly sound, but the challenge here is around a lack of awareness, especially among the general public, and a lack of data around the prevalence of asbestos and potential exposure levels among DIY workers. As one scholar recently noted:

> there appears to be a lack of awareness by many workers of the potential for asbestos exposure and the circumstances in which such exposures can be expected. This leads to potential exposures not being appropriately controlled and probably to workers [including DIY renovators] being inadvertently exposed or exposed at levels higher than is necessary or considered acceptable. Although many of the high-risk situations are known or can be reasonably anticipated, there is a lack of information on the frequency and levels of exposures associated with many of these third wave exposure situations, making it difficult to develop appropriate guidance regarding preventing and controlling the exposures.[42]

We also take the view that, while social landlords are obliged to keep a register of asbestos in their homes, private landlords do not need to do this; social tenants may also not be given a copy of their home's asbestos report. This can leave tenants at risk of accidentally disturbing the material.

To deal with these issues, we are calling on Government to carry out the following reforms:

Policy recommendation

- Government to support a major public awareness initiative aimed at both the occupants of homes and tradespeople working on them to ensure that they are alert to the potential for asbestos-containing materials to be found in homes, and how to appropriately deal with the materials when discovered
- Social and private landlords to be required to conduct an asbestos survey by a licensed professional, maintain a record of this survey and any subsequent alterations to asbestos materials in the property
- Social and private landlords should be required to provide tenants with a copy (free of charge) of this survey when they move into a property (or once completed, for sitting tenants)
- Home surveys on buildings built before 2000 must have an asbestos check in them
- Landlord stock condition surveys must include an asbestos register on buildings built before 2000.

Formaldehyde and other Volatile Organic Compounds

Volatile Organic Compounds are a set of chemicals that can easily vaporise at room temperature. There are a range of technical definitions used but the one adopted by the relevant British Standard is used by the UK Government.[43] VOCs are commonly found in homes; they give perfumes their scents and are used by animals and plants for communication roles. However, they are also a common form of air pollutant in the home. VOCs include aromatic hydrocarbons, aromatic alcohols, terpenes, glycols, aldehydes and other chemicals. Formaldehyde is one of the most common found indoors. Some VOCs, like formaldehyde, are dangerous to humans; some, which are not toxic in small or acute doses, may still have toxic effects following long-term exposure. Exposure to some VOCs can cause serious health problems, including allergies, asthma, irritation, liver and kidney damage, and increased cancer risks.[44]

VOCs are found in a wide range of building materials used in homes. For example, formaldehyde can be released from: wood, laminate, mineral wool, some types of insulation, some pressed wood products (including MDF), adhesives, paints, polishes and wallpapers; it can also be found in many items of furniture and furnishings, as well as candles, air fresheners and wood-burning fireplaces.[45]

Some limits have been placed on the levels of VOCs in particular products, like paints and varnishes.[46] In 2019, Public Health England introduced guidelines for safe VOC levels in doors,[47] but these are not regulations. Also in 2019, the WHO established an indoor air quality limit for formaldehyde, which in 2020 the EU proposed bringing into law as a regulation. This has not been implemented in the EU yet and no progress has been made towards adopting a limit in UK law either, though HSE has been examining actual indoor levels in the UK to help determine whether regulations are needed.[48]

It seems likely that many homes have VOC levels exceeding the safe guidelines. One recent survey by Airtopia of a sample of UK homes found that 45% had levels of VOCs above healthy levels, with 17% reporting high or serious levels; 20% of homes had 'significant' formaldehyde levels.[49] If these results are representative, this points to a very serious public health problem, and suggests that stronger regulations need to be brought in.

Policy recommendation

RoSPA takes the view that:

- Maximum indoor air VOC limits should be regulated in the UK, with specific regulations for new-build homes
- Work should be done to better limit VOC levels in construction products and other home products
- Government should regulate for better product labelling for VOCs
- Accreditation schemes, including formal training, must be in place for the domestic ventilation sector.

Social and private landlords

When it comes to owner-occupied homes, responsibility ultimately falls on the owners to keep their homes safe. For social housing, there is a whole regulatory system set up to ensure that Registered Social Landlords (RSLs) keep homes in good working order, fit for human habitation, and to a decent standard. This includes the Decent Homes Standard (which sets minimum standards for social homes that providers must abide by), the Housing Health and Safety Rating System (HHSRS, which assesses hazards in homes), the Social Housing Regulator, and the Housing Ombudsman Service (an independent regulator for dealing with residents' complaints). There are legitimate causes for concern around enforcement of these standards, as evidenced by the death of two-year-old Awaab Ishak in 2020,[50] and RoSPA's own experience is that more could be done to raise standards across the social housing sector. We therefore welcome the inspection powers implemented in the Social Housing (Regulation) Act 2023 and hope to see them used to the fullest extent possible to hold RSLs to account.

However, in England almost 1 in 5 households rent privately – about 4.6m households.[51] And compared to the social rented sector, private landlords operate in a safety 'wild west', with huge variance in performance which would be unacceptable in any other industry. The private rented sector is regulated separately from and less stringently than social housing and lacks much of the regulatory framework which exists for the social rented sector. To be clear, private landlords must:[52]

- Ensure that the property is free of any serious health and safety hazards[53]
- Carry out repairs to the structure, exterior, boilers, pipes and electrics of the property, as well as the water, sanitation and space heating facilities, which it is the landlord's duty to provide; however, landlords are not required to carry out repairs until they are notified of them.[54]
- Install at least one smoke alarm on every storey of their property [55]
- Install a carbon monoxide monitor in the same room as an appliance which could emit the gas
- Maintain an up-to-date Gas Safety Record and Electrical Installation Condition Report
- Ensure that the property has an Energy Performance Certificate rating of E or better
- Ensure that all furnishings comply with the Furniture and Furnishings Regulations (1988), which govern fire safety.

Beyond these basic requirements, there are no set minimum standards for letting a home privately, in terms of space, ventilation, additional safety precautions, accessibility requirements, insulation and energy efficiency, or building materials. There is also no single independent regulator.

In theory, liberalisation of the private rental market should drive up competition between landlords to deliver higher quality housing. In practice, the dynamics in the sector tend to produce the opposite effect, because in many areas there is much more demand for privately let housing than there is supply, and tenants have almost no security of tenure beyond a two-month notice period that their landlords can serve on them at any time in their tenancy without having to give a reason (a so-called 'Section 21 Notice').[56]

This means that tenants have very little, if any bargaining power. They pay a higher share of their incomes towards their housing compared to owner-occupiers and social renters.[57] At the same time, the lack of regulations, decent minimum standards and enforcement means that landlords can legally rent out homes that only just meet the very basic standards outlined above, and there are many who don't even abide by these obligations. In many cases, tenants can feel unable to request repairs out of fear of 'revenge' evictions, or are evicted after making such requests. Given the precarity, cost of housing and the fact that it is not legally their property to alter, tenants often have little incentive or means to carry out expensive repairs or improvements themselves, and could even be penalised or prohibited from doing so by their landlords (many contracts will forbid making alterations or drilling holes, which can mean tenants are not allowed to fit stair gates or window restrictors, for instance – a serious hazard to children's safety).

Local authorities can serve enforcement notices and other types of notices on private landlords if they inspect a property and find it contains certain serious hazards, as assessed through the HHSRS system of classifying hazards.[58] However, the current system puts the onus on tenants to report hazards in the first place, meaning that they have to (a) identify a hazard, (b) understand their rights, and (c) navigate the complex process of reporting it first to the landlord and then, if work is not done, to the local authority. They do this under the possibility of ultimately being served a Section 21 notice. The Deregulation Act 2015 prevents the landlord from serving a Section 21 notice for a time after a complaint has been received about the property, or until six months after an improvement notice is served in respect of hazards.[59]

Nevertheless, there are exemptions against these prohibitions, not all tenants will be aware of these protections, and they may still be evicted after these protected time periods elapse. According to research by Citizens Advice in 2018, private renters who formally complained about issues had a 46% chance of being issued with an eviction notice within 6 months, which had affected an estimated 141,000 tenants since the 2015 laws were introduced.[60]

Even where a landlord is served a notice requiring them to carry out this work, and even if tenants are not evicted, the landlord may increase rent to cover repair costs at the end of the contract and there is no automatic legal obligation for landlords to rehouse tenants during repair works either, even where those works involve hazardous materials like asbestos.[61] Tenants may thus be forced not only to live in a hazardous home, but to pay for their own temporary accommodation while their landlord repairs their home. At the same time, and unlike housing associations, private landlords can of course legally rent out homes which fail to meet the higher Decent Homes Standard and energy performance requirements that are obligatory in the social rented sector.

To make matters worse, private renters are among the most vulnerable housing users. The Government's own data shows that the sector has the highest proportion of ethnic minorities relative to other sectors, and a high proportion in the lowest two income quintiles (41%). Private renters were far more likely to have not

been born in the UK. According to the ACORN category used by the Government, one in four private renters were 'financially stretched' and about one in five were living in 'urban adversity'.[62] As we show in Chapter 9, deprivation and ethnic minority status tend to be correlated with higher accident rates, which can compound inequality further by worsening health, school attendance, ability to work and lifespan. When we add into this mix the lack of regulations around safety in privately let homes, we have a very risky mix of problems which can worsen existing inequalities.

RoSPA wants to see standards improve in the private rental sector, so that tenants are just as likely to live in a decent, safe home as a social tenant. However, we recognise that achieving this in the current market will be challenging given how imbalanced it is. As such, we want to see a combination of improved minimum standards, stronger tenants' rights and protections, and better enforcement to ensure that safety is improved across the sector without putting the burden on the tenant to drive forward change.

Policy recommendation

To improve the safety of tenants in private renting, Government must:

- Implement a Decent Homes Standard for the private rental sector
- Abolish 'Section 21 notices' and ensure that private tenants have security of tenure
- Establish a Private Rental Sector Regulator with inspection and enforcement powers, and place a strong duty on landlords to proactively improve standards
- Create a register of Private Landlords, just as there is of social landlords. Ensure that this register is linked to up-to-date gas safety certificates, potential asbestos surveys, and any other relevant safety documentation
- Ensure that mandatory minimum child safety requirements are introduced for both the private and social rented sectors.

Spotlight on: Child safety

Babies and children are among the most vulnerable groups in society. They are especially at risk of accidental injury which, tragically, can and does lead to death. These risks come in a range of forms, from falls and slips, to drownings and poisonings, to dangers posed by unsafe toys and other products. The effects of this can be horrendous, including death, serious injury and disability; however, even where children fully recover, the time spent away from school can damage academic performance.[63] Given that poor housing and deprivation are associated with increased risks of injury,[64] the fact that this then disrupts education can further compound inequalities. There are also significant psychological impacts, economic costs (including lost productivity on the part of parents), costs to modify a home if required, and financial costs associated with care.

In 2022/3, 50,227 children under 10 were admitted to hospital following a non-transport accident in England. This included almost 22,000 admissions due to falls, over 13,000 admissions following crushing, striking and other accidents caused by 'inanimate' forces, and more than 2,600 injured by other people or animals (including over 1,100 bitten by dogs). There were over 100 hospitalised for drowning, 671 for choking, strangulation or suffocation, and 2,380 for accidental poisonings. Drownings can occur in a range of places like open water, pools, ponds and in the bath; drownings in the bath are more common among the youngest children and children with disabilities and accounted for roughly a third of drowning-related hospital admissions in this age group.[65] It is a small mercy that the number of children who died as a result of non-transport accidents in the UK in 2022 was far lower than these figures, at 61 – but this is 61 too many, as the devastation that flows from these young lives being cut short will attest. Very sadly, babies in the first year of their lives are at particularly elevated risk of accidental death compared to older children (with a rate around 10 times higher than children aged 5 to 9).[66] These deaths are preventable, as illustrated by the 10 children who died in 2022 from drowning in bathtubs at home, and the 6 who fatally drowned in garden ponds, paddling pools and hot-tubs.[67]

Firstly, so many injuries to children result from falls, threats to breathing and various other injuries.[67] Although accidents do happen, the frequency and severity of them are often preventable.[69] These accidents are often linked to inequalities. For instance, severe falls (including falls from height, out of windows and on stairs) often occur in unsafe housing, especially in the private rented sector or in temporary accommodation, where homes may not be fitted with adequate protections like window locks and restrictors, or adequate handrails and surroundings to fit secure safety gates. Parents/carers may lack the equipment, knowledge, resources or contractual rights to make home safety improvements, and landlords may be unwilling to act. Overcrowding (including cases where children do not have their own bed), ventilation issues and the vulnerability of the parents can also compound the risk of accidental injury.

In the past, the Government has supported schemes like 'Safe at Home' which provided education for parents and equipment (including stair gates, for instance) that can reduce accidents in the home in young children – the most important site of accidents for children. The 'Safe at Home' programme, which ran from 2009 to 2011, was very successful ; it provided safety advice and fitted free safety equipment to over 66,000 low-income homes in England and resulted in an 8% reduction in hospital admissions rates for injuries in the under fives in the subsequent 2 years.[70]

Schemes like this tend to be funded for a fixed term or take place in specific local authorities, but this impact is so tangible that they should be rolled out permanently and nationally, to ensure that the next generation grow up with a lower risk of serious accidental injury in childhood. As we will see in Chapter 10, disadvantaged children are at a higher risk of injury than others, so these schemes not only save lives and reduce injury rates, but help to reduce childhood health inequalities.

In another case, the 'Stay One Step Ahead' (SOSA) programme demonstrated strong cost benefits as well as reductions in injuries. This was an intervention scheme implemented in parts of Nottingham with high levels of health and social needs. It involved health visiting teams, children's centres and family mentors (lay home visitors) providing standardised evidence-based home safety information and support to over 4,000 families. Analysis of the programme found it cost on average £30 per child, but reduced short-term healthcare spending by £42; it increased the number of safety practices in homes (e.g. storing poisons safely, having a fireguard or having a fire escape plan) and reduced injuries per child by 0.15. Solely in terms of healthcare, SOSA saved £1.39 for every £1 spent.[71] Given that there can be a strong economic argument for these sorts of interventions, and there are proven safety and health benefits, we argue that these schemes should be rolled out nationally and permanently.

Policy recommendation

- Government should roll out permanent, national home safety programmes to deliver risk assessments, advice and equipment (including fitting of equipment where appropriate) to disadvantaged households with young children.

It is worth noting that there are a wide range of products with unique child safety concerns as well – from button batteries to magnets, from baby slings to nappy sacks, from laundry capsules to unsafe toys. RoSPA provide information and support to families on these risks, but there are always challenges around how to reach parents. We are calling on Government to expand and deepen its partnerships with organisations like RoSPA to deliver public information campaigns aimed at reducing childhood accidents.[72]

Policy recommendation

- Government should deliver public campaigns around child safety.

We are also calling for more training for people who offer home safety advice to parents. Midwives, health visitors, family support workers and early years practitioners all give home safety advice, but they are not always trained to offer the most appropriate solutions and advice to parents – and sometimes, although well meaning, the advice may not be correct. We would advise government to provide improved and up-to-date training to them in this area.

Policy recommendation

- Government should provide up-to-date home safety training and improved resourcing for midwives, health visitors, early years practitioners and other family support workers
- Government should ensure that resourcing among these vital workers is consistent across localities and generally improved.

As outlined earlier, part of the challenge in accident prevention is data gathering. Thankfully, in England, the National Child Mortality Database (NCMD) has been set up by the University of Bristol (and collaborators) and is funded by NHS England. Using comprehensive data and standardised systems, it collects national data on child deaths and analyses this information to provide valuable insights, which are supporting practitioners to develop interventions. It is the first of its kind in the world. However, currently NCMD only exists in England; we would like to see either Government support for an expanded remit across the whole of the UK or for devolved nations to set up equivalent organisations in their jurisdictions (while ensuring that data can be compared across nations).

Policy recommendation

- Government should either support an expanded remit for the National Child Mortality Database so that it works across the whole of the UK; or devolved nations should set up equivalent organisations in their jurisdictions while ensuring that data can be compared across nations.

Finally, as outlined in our discussion on product safety and later in our chapter on leisure safety, we also want to see improved education for children around safety. We are calling for children to have both classroom-based lessons about water safety and swimming lessons in school, and we're also calling for product safety and consumer rights to be embedded in the National Curriculum.

Policy recommendation

- Government must ensure that all children are able to swim (including through swimming lessons at school)
- Government must ensure that all children are taught water safety in effective classroom-based lessons
- Government must embed product safety and consumer rights in the National Curriculum.

[1] Public Health England, *Indoor Air Quality Guidelines for Selected Volatile Organic Compounds (VOCs) in the UK* (London, 2019), p. 3.

[2] 62.5% in England and Wales in 2021: ONS, 'Housing, England and Wales: Census 2021', 5 January 2023.

[3] Appendix 1, Chapter 5. 2019 is the most recent year for which this data was recorded (we make recommendations around this in Chapter 14). The ONS hold information for England and Wales only – more work needs to be done to build up a UK-wide picture of location of accident information.

[4] Obtaining this data requires using NHS England Digital's 'Admitted Patient Care Activity, 2022/3: Diagnoses' data as this includes 4-digit ICD code breakdowns. This figure is based on the number of secondary diagnoses where the fourth digit was '0', across codes W00–X59. This amounted to 313,507, 41% of a total of 759,375 secondary diagnoses across all location codes and 62% of the 509,995 secondary diagnoses with a known location.

[5] Home Office and Ministry of Housing, Community and Local Government, 'Progress against the Grenfell Tower Inquiry Phase 1 Recommendations, December 2022', updated 19 September 2024.

[6] Grenfell Tower Inquiry, *Phase 2 Report: Report of the Public Inquiry into the Fire at Grenfell Tower on 14 June 2017* (London, 2024), vol. 7, part 14, chapter 113.

[7] RoSPA, 'Safer by Design' (retrieved 25 September 2024). See, in particular, the table of recommendations.

[8] Mark Farmer, *The Farmer Review of the UK Construction Labour Model: Modernise or Die* (London, 2016), p. 16, for some discussion of this issue. On fragmentation, see *ibid*., pp. 17–18.

[9] For deaths, see ONS, NRS and NISRA, underlying cause of death statistics, 2013 to 2022, analysis of 3-digit ICD code data for W10 (see Appendix 1, Table 1 for more detail on sources). There were 879 deaths attributed to that cause in 2022, but most previous years had been between 700 and 800. For hospital admissions, see NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022–23' (retrieved 23 September 2024).

[10] RoSPA, 'Safer Stairs' (retrieved 25 September 2024).

[11] ONS, 'Age of the Property is the Biggest Single Factor in Energy Efficiency of Homes', 6 January 2022.

[12] See, Centre for Aging Better, Homes: *The State of Ageing 2023–24* (London, 2024).

[13] See Chapter 3.

[14] Yasmin Rufo, '"Are We the Next Grenfell with Our Flammable Flats?"', BBC News, 29 August 2024.

[15] Fire Protection Association, 'Data Shows Two Thirds of Buildings with Cladding Defects Still to Begin Remediation', 14 January 2024.

[16] National Fire Chiefs Council, 'Domestic Fire Detection & Assistive Technology' (retrieved 26 September 2024).

[17] Scottish Government, 'Fire and Smoke Alarms: The Law' (retrieved 2 October 2024).

[18] ONS, 'Census 2021: How Homes are Heated in Your Area', 5 January 2023.

[19] RoSPA, 'Gas Safety' (retrieved 26 September 2024).

[20] Gas Safe Register, 'More than a Million Households Put at Risk by Illegal Gas Fitters', 2016.

[21] *Ibid.*

[22] National Institute for Health and Care Excellence, 'Carbon Monoxide Poisoning: How Common Is It?', June 2023. The exact figure is not available from official sources, as carbon monoxide is linked with 'other gases and vapours' in the ICD schema.

[23] HSE, 'Cancer and Construction: Asbestos' (retrieved 26 September 2024).

[24] *Ibid.*

[25] Cancer Research UK, 'Risks and Causes of Mesothelioma' (retrieved 26 September 2024).

[26] HSE, 'Introduction to Asbestos Safety' (retrieved 26 September 2024).

[27] Cancer Research UK, 'Mesothelioma Statistics' (retrieved 26 September 2024). 58% of new cases are in the over 75s and 90% are in the over 65s: Cancer Research UK, 'Mesothelioma Incidence Statistics' (retrieved 26 September 2024).

[28] HSE, *Asbestos-Related Disease Statistics, Great Britain 2024* (London, 2024), p. 9.

[29] UK Health Security Agency, 'Asbestos: General Information', 25 April 2024.

[30] All-Party Parliamentary Group on Occupational Safety and Health, *The Asbestos Crisis: Why Britain Needs an Eradication Law* (London, 2015), p. 6.

[31] Andrew T. Carswell, *The Encyclopedia of Housing*, 2nd ed., vol. 1 (London, 2012), p. 168.
[32] Daniel King and Walter Pacheco, 'Report: 1.5 Million UK Homes Contain Asbestos', *Asbestos.com* (The Mesothelioma Center, 27 November 2019).
[33] BBC News, 'Homeowners "Ignorant on Asbestos"', 2 July 2010
[34] ONS, 'House Building, UK: Permanent Dwellings Started and Completed by Country', 29 August 2024, Table 3a.
[35] Andrew Don, 'Asbestos: The Hidden Health Hazard in Millions of Homes', *The Observer*, 1 May 2011.
[36] The Control of Asbestos Regulations 2012.
[37] HSE, 'Introduction to Asbestos Safety' (retrieved 26 September 2024).
[38] All-Party Parliamentary Group on Occupational Safety and Health, *The Asbestos Crisis: Why Britain Needs an Eradication Law* (London, 2015).
[39] See, for instance, Statista, 'Year-on-Year Percentage Change in the Online Sales of Gardening and Home Improvement Products in the United Kingdom (UK) during the Coronavirus Outbreak in 2020', 1 December 2023.
[40] BBC News, 'Homeowners "Ignorant on Asbestos"', 2 July 2010.
[41] Tim Driscoll, 'The "Third Wave" of Asbestos Exposure in Occupational Settings', *Occupational and Environmental Medicine*, vol. 74 (2017), pp. A132–A133.
[42] *Ibid*.
[43] BS EN16516:2017: this distinguishes very volatile organic compounds as those VOCs which 'elute before n-hexane on the gas chromatographic column', volatile organic compounds as those 'eluting between and including n-hexane and n-hexadecane', and semi-volatile organic compounds as those 'eluting after n-hexadecane'. The standard's Appendix G includes a list of compounds.
[44] Public Health England, *Indoor Air Quality Guidelines for Selected Volatile Organic Compounds (VOCs)* in the UK (London, 2019).
[45] HSE, 'UK REACH – RMOA for Formaldehyde and Formaldehyde Releasers', 25 June 2023.
[46] The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012.
[47] Public Health England, *Indoor Air Quality Guidelines for Selected Volatile Organic Compounds (VOCs) in the UK* (London, 2019).
[48] HSE, 'UK REACH – RMOA for Formaldehyde and Formaldehyde Releasers', 25 June 2023.
[49] Global Action Plan, 'Nearly Half of UK Homes Have High Indoor Air Pollution – New Report', 5 June 2019.
[50] Abbie Jones and Daniel O'Donoghue, 'Awaab Ishak: Family Demands "Punishment" for Boy's Mould Death', *BBC News*, 17 November 2023.
[51] Department for Levelling up, Housing and Communities, 'English Housing Survey 2021 to 2022', 13 July 2023.
[52] Ministry of Housing, Communities and Local Government, 'Landlord and Tenant Rights and Responsibilities in the Private Rented Sector', 9 April 2019.
[53] *Ibid*.
[54] Section 11 of the Landlord and Tenant Act 1985.
[55] Shelter, 'Repairs under Section 11' (retrieved 25 September 2024).
[56] Section 21 of the Housing Act 1988. But see the discussion below around the protections afforded by the Deregulation Act 2015, sections 33 and 34.
[57] Department for Levelling up, Housing and Communities, 'English Housing Survey 2021 to 2022', 13 July 2023.
[58] Under Part 1 of the Housing Act 2004.
[59] Under sections 33 and 34 of the 2015 Act, a landlord cannot serve a section 21 notice on their tenants for six months if they are given an improvement notices by the local authority under section 11, 12 or 40(7) of the Housing Act 2004, relating to hazards or remedial action.
[60] Citizens Advice, 'Complain and You're Out: Research Confirms Link between Tenant Complaints and Revenge Eviction', 28 August 2018.
[61] Shelter, 'Asbestos in Housing' (retrieved 25 September 2024).
[62] Department for Levelling up, Housing and Communities, 'English Housing Survey 2021 to 2022', 13 July 2023.

[63] Joanna F. Dipnall, et al., 'Impact of an Injury Hospital Admission on Childhood Academic Performance: A Welsh Population-Based Data Linkage Study', *Injury Prevention*, vol. 30 (2024), pp. 206–215.

[64] See Chapter 10 for issues around inequality, and see BRE, *The Cost of Poor Housing in England by Tenure* (Watford, 2023), p. 3.

[65] Appendix 2, Table 3. For poisonings, 2,068 of these were in children aged under 5 (see NHS Digital, 'Admitted Patient Care Activity: External Causes, 2022–23' (retrieved 23 September 2024)).

[66] Appendix 1, Table 7. Note that the National Child Mortality Database (NCMD) has recorded 273 non-transport accidental deaths in children in the last 3 years, averaging at 91 per year, suggesting a likely undercount in the ONS data (information supplied by NCMD)".

[67] National Child Mortality Database, *Child Drowning Deaths in England, 1 April 2022 to 31 March 2023* (Bristol, 2024), table 3.

[68] The Scottish Trauma Action Group found that falls were the largest cause of severe injury in young children, accounting for over 38% of severe injuries in children under 3 and over 35% in children aged 3 to 5: Dr Marie Spiers, *Severe Injury in Children and Young People: NHS Scotland, 2018–2023* (Edinburgh, 2023), figure 5.2.

[69] For insights into this issue, see National Child Mortality Database, 'Child Mortality and Social Deprivation', 13 May 2021

[70] Trevor Hill et al., 'Impact of the National Home Safety Equipment Scheme 'Safe At Home' on Hospital Admissions for Unintentional Injury in Children under 5: A Controlled Interrupted Time Series Analysis', *Journal of Epidemiology & Community Health*, vol. 76, no. 1 (2022), pp. 53–59. The scheme provided: 'training for staff delivering the scheme, home risk assessment, advice and education for parents and free provision and installation of safety equipment including safety gates, fireguard, window restrictors, non-slip bath/shower mat, kitchen cupboard locks, corner cushions and blind cord shorteners'.

[71] M. Jones et al., 'Cost-Effectiveness of the "Stay One Step Ahead" Home Safety Programme for the Prevention of Injuries among Children under 5 Years', *Injury Prevention* (advance issue, printed online 31 August 2024).

[72] See the section on poisonings in Chapter 3 for more information on the Take Action Today campaign

CHAPTER 07

Product safety

Product safety

In the previous chapter, we saw how our homes can be dangerous and can be made safer by design and proper maintenance. But it's not just how homes are built that matters. The products we populate them with are hugely important to accident prevention. Thankfully, we have a host of rules and standards to protect us, including the Consumer Protection Act 1987, statutory regulations and voluntary standards.

However, we are concerned that the people who enforce those regulations, especially Trading Standards officers, have faced huge budget cuts, reducing their ability to hold suppliers to account. At the same time, the rise of online marketplaces has created a vast and complex means of obtaining unsafe – sometimes lethal – products at the click of a button; when this is combined with weakened enforcement capacity, we have a very dangerous mix indeed, swamping the UK with (often imported) products masquerading as safe. Sadly, those on the lowest incomes are often most at risk of being affected, as unsafe products are often sold cheaply, targeting the disadvantaged at a time when budgets are especially tight. Staggeringly, we are flying blind into this storm, as there is no official data collection or monitoring of accidents caused by products, and at the same time we are facing new challenges like the rise of lithium-ion chargeable batteries and an ever-evolving landscape of children's toys which are not always as safe as they seem.

We are calling for a robust, joined-up, data-led approach to managing product safety. We need a better funded cohort of Trading Standards officers, who are at the frontline of the battle against dangerous goods in our communities. We need targeted investment in Trading Standards in port areas. We need clearer and tougher rules on online marketplaces. We need to raise public awareness of the risks. And we need proper national monitoring of product-related accidents and injuries. With those changes we can better tackle the rising tide and striking accessibility of unsafe products in the UK.

The problem

In 2022, the Office for Product Safety and Standards (OPSS), the UK's regulator for product safety, tested over 2,260 products bought from online marketplaces in the previous year. This was not a random sample; OPSS tested products which are often recalled or banned: cosmetics, small mains-powered electrical items, products containing button batteries, toys, complex PPE to protect users from serious injury, and other products like magnetic toys and angle grinder attachments. OPSS targeted low-price products. **It found that 81% failed to meet the minimum regulatory requirements for safety. Disturbingly, 80% of the over 700 children's toys tested failed the assessments.**[1]

The OPSS study was not a nationally representative sample; it sampled from product types and price ranges which are often correlated with regulatory non-compliance. However, it does illustrate just how easy it is to find dangerous products, especially online. Indeed, other organisations have reported similar findings.

Electrical Safety First have labelled online marketplaces 'a hot bed for dangerous and non-compliant goods'.[2] The British Toy and Hobby Association have reported similar levels of non-compliance when testing over 500 products bought online.[3]

These findings are worrying, given that 23% of retail transactions now happen online in the UK (one of the highest rates in the world), and ecommerce is worth over £101bn annually in the UK, making it the third-largest online retail market in the world, behind China and the US.[4]

Trading Standards

Trading Standards officers sit at the frontline of our safety from dangerous products, working hard to deal with an enormous risk. However, according to the Chartered Trading Standards Institute (CTSI), spending on trading standards has been cut by more than 50% since 2010, with staffing levels declining by at least 30% so that many authorities now lack the resources to enforce the law properly.[5] Another CTSI report found that 43% of trading standards teams felt that they could not deal with consumer detriment effectively (consumer detriment is the harm or loss a consumer experiences when a product or service does meet expectations or standards).[6] Not only have budgets and staff numbers fallen, but with such little room for investment in training and skills, there is a risk that there will not be a long-term pipeline of talent to fill these skilled jobs in the future, which risks exacerbating the problem in the long term.

To illustrate the issue, in 2024, it was reported that one local authority was cutting its trading standards team from 4 to 1, which risked, in the words of CTSI, 'effectively legalising low-level criminality because the criminals can get away with stuff'.[7] Without effective enforcement, the tide of unsafe products entering the UK *will* turn into a flood.

Local authorities are in a bind over this situation. Faced with increasingly tight budgets (and a 27% real terms cut to core spending since 2010),[8] they are struggling to maintain statutory services across the board, yet equally recognise the public safety duties they have. To resolve this dilemma, we endorse CTSI's call for a long-term, staggered boost in investment to secure an extra (net) 2,000 more trading standards officials, including 15% at apprentice level.[9] We also call for dedicated funding top-ups for local authorities with borders or ports in their areas, to better support those authorities where imported goods (which are at particular risk of non-compliance) enter the market.

Policy recommendation

- Recruit, on net, 2,000 extra trading standards officers over the course of this Parliament to bolster public safety in our communities (including 300 apprentices)
- Provide top-up support for Trading Standards in port or border areas.

Online marketplaces

As outlined above, online marketplaces have become a huge part of the economy, changed the way many people shop, and include some of the world's largest businesses. Online marketplaces (OMPs) can sell goods themselves or host third-party sellers, the latter being a particularly common form of OMP. However, as the OPSS study showed, many goods sold through OMPs are unsafe. In 2022/23, Suffolk Trading Standards found that 49% of examined consignments passing through Felixstowe were unsafe, suggesting the enormity of the problem.[10]

Online marketplaces are among the wealthiest, largest and most profitable businesses on the globe. They should be able to regulate themselves given their size and resourcing, but these figures suggest that they are clearly not doing this sufficiently.

As a result, better regulations, enhanced enforcement and improved public awareness are needed in combination to change the state of play. Our regulations have not caught up with the proliferation of OMPs, which has allowed some OMPs to argue that they don't have a duty to make third-party sellers comply with regulations; in their view, it's the third-party seller that's solely at fault. Given the number and diversity of third-party sellers and the fact that they are based abroad, enforcement can be challenging, meaning that, without the OMPs stepping in, unsafe goods can easily get into the UK.

To resolve this problem, we want to see better, simplified and stronger regulation. We would like to see regulations brought in which would make OMPs legally jointly liable for the safety of the products sold through their sites, ensuring that they share responsibility with the third-party sellers they host. We do not want to stifle innovation or reduce the liability of the third-party sellers themselves, so we are open to the notion that tiered responsibility could be introduced to reflect an OMP's size, risk and closeness to the illegal activity.

This would bring legal duties for online businesses in line with the legal duties placed on social media companies by the Online Safety Act 2023, and it would echo wider trends around the world, including in the US where the Consumer Product Safety Commission has found one of the largest OMPs responsible for the products third parties sell on its site.[11]

Public buy-in is also vital. We encourage Government to support public awareness campaigns about the risks of unsafe and counterfeit goods being sold online, and we want to see information about consumer rights, OMPs and product safety included in the National Curriculum.

Policy recommendation

- Modernise product safety regulations by making online marketplaces legally liable for products sold on their sites, including by third-party sellers
- Promote public awareness of the risks of counterfeit and unsafe goods being sold online
- Embed product safety and consumer rights in the National Curriculum.

Data recording of injuries involving products

A new government could quickly and affordably improve product safety by better capturing in A&E attendance data details of accidents caused by product safety issues.

We used to do this very well in the UK using the Home and Leisure Accident Surveillance System (HASS/LASS) which recorded details of home- and leisure-related accidents at a sample of hospitals in the UK, at the cost of roughly £1m annually.[12] It was a pioneering system which helped medical practitioners, trading standards officers and government to identify, regulate and remove from circulation dangerous products. However, after 25 years, funding was removed for HASS and LASS in 2003 and since then there has been no proper monitoring of accidents caused by product safety issues.[13]

Since then, there have been significant changes in the public sector funding environment, which have led to cuts to trading standards departments, as outlined earlier in this chapter. At the same time, the emergence of internet shopping has brought about an enormous and rapidly changing online marketplace for imported products which are often not safe. When combined with the cuts to trading standards enforcement, this has created something akin to a huge black market with more new and potentially unsafe products coming into circulation than ever. And we are currently 'flying blind' without the data to know which are unsafe, where emerging threats are, and where we should be targeting ever-scarce enforcement resources.

Reviving HASS and LASS would allow trading standards departments to better monitor emerging threats to public safety with the resourcing they have. It is not a 'magic bullet', but it would be a quick and cost-effective way of empowering officials to remove unsafe products from circulation, save lives, reduce injuries and, in turn, reduce some of the pressure on the UK's overstretched NHS.

Policy recommendation

- Government must revive the Homes and Leisure Accident Surveillance System to collect data on accidents at home and during leisure activities, including information about products involved
- This data should be made available to trading standards officers, regulators, health, social care and safety practitioners, NGOs, and researchers to support future targeted interventions.

Lithium-ion batteries

Lithium-ion batteries have emerged as one of the most efficient and reliable energy storage systems, with widespread and increasing applications in consumer electronics and electric/hybrid vehicles. There are a range of performance-related benefits to using these batteries and, as electrification and the spread of portable digital devices continues, their use has increased sharply.[14] However, owing to their chemistry, and under certain conditions, they can present a significant fire and explosion hazard.

In 2023, the number of fires caused by lithium-ion batteries in the UK increased by 46%, from 630 to 921.[15] There are numerous cases of serious domestic fires, some of which have led to fatalities. Lithium-ion battery fires are often linked to electric bikes (270 out of 921), electric scooters (125) or electric cars (118).[16] Data

voluntarily reported to OPSS by fire and rescue services show that over 20% of e-bike and e-scooter fires occur in flats or maisonettes, a further 13% in houses of single occupancy and almost 10% in houses of multiple occupation.[17] It is also worth noting that these fires produce hydrogen fluoride and phosphoryl fluoride gasses, which are highly toxic.

There are ways that consumers can reduce the risk, including buying batteries from reputable providers, only using the charger that came with the device, using circuit breaker protection, and charging outdoors away from heat or sunlight (or, if not possible, in a room without soft furnishings or combustibles). Consumers should not leave devices charging over night and should unplug them when charged fully; they should not use damaged batteries. However, a recent survey found that 71% of the public didn't know the signs that a battery might be about to ignite, suggesting that awareness around battery fire risks is lacking.[18] Public campaigns should be used to educate people on these risks and mitigation strategies.

However, this is not just about consumer behaviour. Electrical Safety First have argued that sellers should not be left to self-regulate given the high levels of risk associated with these products.[19] We agree, and we argue that batteries should be tested by independent, third-party testers to ensure that they meet regulations and are safe.

Policy recommendation

- Government should support public information campaigns around the risks of lithium-ion batteries and safe practices for using them
- Lithium-ion batteries should be subjected to third-party, independent testing before they can be accredited.

Other product risks

The complexity and variety of the marketplace means that there are new products being made available all the time, and how people use products also changes. RoSPA has a wide range of information resources and campaigns focused on individual products. Backed by effective data monitoring (as described above), a national approach can build on this by responding to new risks, products and behaviours, and targeting public information campaigns accordingly.

Policy recommendation

- We call on Government to monitor accidents and support public information campaigns and education on product safety.

[1] OPSS, 'OMP Product Testing Programme: October 2021 to September 2022', 23 August 2023.

[2] Electrical Safety First, 'Comment on the Recent OPSS Investigation Concerning Dangerous Products Sold on Online Marketplaces', 25 August 2023.

[3] Quoted in 'More than 80% of Low Quality Items Sold via Online Marketplaces Fail Safety Tests', *Sky News*, 25 August 2023.

[4] Jake Pool, 'Online Marketplaces in the UK: Amazon and eBay Dominate', *Webretailer*, 5 March 2024.

[5] Chartered Trading Standards Institute (CTSI), *CTSI Manifesto: Helping Local Communities and Businesses to Prosper* (Basildon, 2024), p. 9.

[6] CTSI, *Workforce Survey 2017* (Basildon, 2017), p. 2.

[7] Helen Nugent, 'Council Funding on a Cliff-Edge', *Journal of Trading Standards*, 15 January 2024.

[8] Local Government Association, 'Save Local Services: Council Pressures Explained' (retrieved 24 September 2024).

[9] CTSI, *CTSI Manifesto: Helping Local Communities and Businesses to Prosper* (Basildon, 2024).

[10] CTSI, *Mind the Gap Between the Chain and the Platform* (Basildon, 2024), p. 6.

[11] US Consumer Product Safety Commission, 'CPSC Finds Amazon Responsible Under Federal Safety Law for Hazardous Products Sold by Third-Party Sellers on Amazon.com', 30 July 2024.

[12] Running from 1978 to 2002, HASS/LASS ultimately captured data on 6.8m accidents. It collected data on details of the person who had the accident, including age and sex; details of what happened and where; the circumstances surrounding the accident (e.g. what was the person doing at the time); the injury or injuries caused by the accident; the involvement of products or other items in the accident; and the outcome (e.g. admission to hospital).

[13] RoSPA, 'Accident Statistics', archived via the Internet Archive on 24 February 2024.

[14] Yuqing Chen, 'A Review of Lithium-Ion Battery Safety Concerns: The Issues, Strategies, and Testing Standards', *Journal of Energy Chemistry*, vol. 59 (2021), pp. 83–99.

[15] QBE, 'UK Fire Services Face 46% Increase in Fires Linked to Lithium-Ion Batteries' (retrieved 24 September 2024).

[16] *Ibid*.

[17] OPSS, 'Fires in E-Bikes and E-Scooters – 2022 and 2023', 27 August 2024, figure 6.

[18] Christine Ro, 'Why the E-Bike Boom is Raising Fire Fears', *BBC News*, 9 February 2024.

[19] Tom Gerken and Chris Vallance, 'E-Bike Battery Fires Prompt Call for Better Regulation', *BBC News*, 27 July 2023.

Case study

Liz, 28, is a carer for adults in the community. She lives in Lancashire with her partner Josh, 32, who is a technical support advisor. She says:

I've played American football since I was 10. I was running down the field during a drill and as I planted my foot on the ground, I felt a pop in my left knee and collapsed. I knew I'd done something serious but at A&E, an x-ray showed no broken bones.

Over the weeks it improved but during a game, I felt another pop and the injury went from bad to worse. A scan showed a fully torn ACL ligament, a medial meniscus tear and I'd also sprained my medial collateral ligament (MCL) – the inside of my knee. I would need at least one operation to fix it and knew that I wouldn't be able to play for Great Britain in the European championships.

Working as an adult carer became really difficult as it's a physically demanding job. On one occasion, my leg popped out while at a client's house and I had to ask the client's daughter to help me pop it back in. After the operation I couldn't continue working, I was in agony and on crutches. We'd just bought a house and I'd been taking on extra shifts to pay the mortgage. Suddenly I wouldn't be earning anything apart from statutory sick pay.

After a couple of weeks, I started doing some office work on the phones, but the only available shifts were at weekends. It meant cramming in often 17-hour days while also trying to keep my leg elevated. I'd been overcompensating by using my right leg more, so it also became swollen and extremely painful.

A month after my operation, I'm still doing office shifts because I'm not fit enough to do my usual job. I wear a leg brace 24 hours a day which is locked at a 90-degree angle and I'm slowly weaning myself off the crutches. I lay awake wondering how I'm going to pay the mortgage and it's going to be at least a year before I can finally do the sport I love again.

CHAPTER 08

Water and leisure safety

Water and leisure safety

Leading an active lifestyle is hugely beneficial to our health and wellbeing. It's also a key part of building up resilience to injury. Being physically healthy can help people who suffer an accident avoid serious injury, and often aids recovery. RoSPA therefore encourages people to keep fit and exercise. There are other benefits too: people walking or cycling are not only keeping fit, they're also reducing pollution by opting not to drive. People who play sports are engaging with their community and fostering a sense of place. Sports and leisure activities are also huge contributors to the economy, and, done responsibly, can provide incentives for local authorities and businesses to provide public amenities and keep their natural spaces clean and accessible.

However, while we want to encourage people to keep fit, healthy and have plenty of fun in the process, it is key that all this is done safely. No activity is completely without risk and we would not want people to stop playing sports or enjoying the outdoors because of the risk of accidents. But there are ways we can reduce the likelihood of serious injury, often by taking precautions, raising awareness and engineering in safety. With the right preventative measures, we can reduce the likelihood of harm without people having to sacrifice the fun. Indeed, done properly, accident prevention should help people to enjoy these activities.

Here, we outline the work that's going on to support water and leisure safety, and we set out further steps which Government can implement to reduce the risk of serious and fatal injuries in these sectors.

Water safety

Many people enjoy swimming and leisure activities involving or near to water, but unfortunately water presents a major risk to health. Sadly, there were 236 accidental water deaths (in natural water) in 2023 in the UK, up from 226 in 2022. Thankfully, this number is well below the 2013–15 three-year average of 344,[1] but still highlights the risks of drowning in the sea or inland water. Thousands more people are rescued from water each year.

Many of these incidents result from simple everyday scenarios where there was no intention of being in water, such as a trip or fall into water, or misjudgments such as underestimating the effect of swimming in cold open water unprepared; poor awareness of risks can also contribute to drownings.[2] Other incidents result from inherently risky activities including jumping/tombstoning from a great height into water.

Thankfully, drowning rates have fallen over the last fifty years. RoSPA has been partnering with other organisations like the Maritime and Coastguard Agency (MCA), the Royal National Lifeboat Institution (RNLI), Royal Life Saving Society UK (RLSS), the Canals and Rivers Trust, British Sub-Aqua Club and Swim England to reduce rates of drowning in a concerted effort. We work collaboratively as members of the National Water

Safety Forum (NWSF), which coordinates a data collection programme called WAID to develop a robust database of drowning incidents in the UK. In 2016, the NWSF produced the UK's first Drowning Prevention Strategy, covering the ten years to 2026. RoSPA was also a lead author on Water Safety Scotland's drowning prevention strategy (launched in 2018) and advised Water Safety Wales when it published its strategy in 2020.

These efforts have provided solid foundations for progress, but there is still more to do. We are calling on Government to support the establishment of the next UK Drowning Prevention Strategy in 2026 to give strategic vision and oversight over progress for the next decade.[3]

While national policy is key to driving success, ultimately many drownings can be prevented by intervention on the ground. We are therefore calling for all local authorities to have an up-to-date and effective water safety policy which outlines the improvements that need to be made at a local level.

Public education is also key. We want to see children be able to swim and understand the risks associated with water. RoSPA is calling on government to ensure that there is mandatory and effective classroom-based education on water safety and swimming lessons in schools, as both go hand-in-hand to support water safety among young people.

Classroom education is vitally important because swimming competency alone is not necessarily enough to prevent someone from drowning in open water: cold water shock and strong currents can kill even strong swimmers, and it is essential that children (and the wider public) are taught about these risks. In remote areas, there might be long distances to travel to swimming pools, making it hard for children to be taught to swim; but they might have ready access to open water, so it remains essential that children are taught in the classroom about water safety and risks. All too often this does not happen, or does not happen effectively, which is why we are calling for it to be made mandatory.

Opportunities to learn and practice swimming in safe environments outside school nevertheless remain important for helping children to lead safe and active lifestyles. However, according to an analysis by *The Guardian* and Sport England, there has been a net decline of 382 swimming pools in England since 2010, with the declines most pronounced in the most deprived areas.[4] This is unacceptable. We are calling on Government to reverse this decline and support affordable access to local swimming pools.

Finally, one of the biggest challenges from a policy perspective is that no department will accept responsibility for water safety. Government has previously conducted a lengthy review into responsibility for beaches, which indicated that the Maritime Coastguard Agency has some responsibility in this area. However, it remains unclear who has the legal responsibility for drowning prevention on both the coast and inland, meaning local stakeholders can, and often do, avoid taking action.[5] Government should follow international guidance from the UN and WHO to appoint a national 'focal point' for drowning prevention – an organisation or department that can take a lead nationally. It should also look to set out clearly and, if need be, in law where the responsibilities for drowning prevention lie.

As we will see in Chapter 9, climate change is expected to increase flooding and weather extremes, which will also have impacts on water safety. We outline recommendations on this in that chapter, but it is essential that Government plan for this increased risk.

Policy recommendation

- Government to support the establishment of a national water safety (drowning prevention) plan from 2026
- Local authorities should be required to have updated and effective water safety plans/policies in place
- Government must reverse the decline in swimming pool numbers since 2010
- Government must ensure that all children are able to swim (including through swimming lessons at school)
- Government must ensure that all children are taught water safety in effective, classroom-based lessons
- Government should appoint a national 'focal point' for drowning prevention – an organisation or department that can lead in this space
- Government should look to set out who has responsibility for drowning prevention in inland and coastal waters.

Sports safety

Water-based activities are, of course, not the only leisure activities which we need to account for. Other types of sport involve varying levels of risk. This is why having access to safe, supervised leisure facilities with risk assessments, trained staff and first aid equipment is key to helping people play sports safely; proper education and training for participants is also important.

Therefore, we are disheartened to read about local leisure centres closing or being threatened with closure in recent years, in much the same way that swimming pools are being shut down. We note a mixture of long-term pressures on local authority funding and acute strains caused by the rising cost of energy;[6] short-term funding boosts in 2023, to recognise the higher running costs, are time-limited and, while welcome, do little to put leisure centres on a more sustainable financial footing.[7]

Given the enormous public health benefits that these services bring, by keeping healthier and fitter, and the social and civic benefits they bring to local communities, we cannot continue to allow leisure centres and sports facilities to close. We are therefore calling on Government to protect them and ensure that no more have to shut down.

Finally, we also recognise that in recent years outdoor pursuits have become more popular, especially mountaineering and hiking. However, while we encourage participation in active lifestyles, we recognise that public awareness and more joined-up work on safety would benefit this growing cohort of people. Government should consider setting up a forum for experts to advise on safety in these areas, for instance a 'Mountain Safety Forum'.

Policy recommendation

- Government must support healthy, safe and active lifestyles by protecting public leisure centres and sports facilities to ensure that no more close and to allow the public to enjoy exercise in properly run, safe environments
- Government should encourage active lifestyles and support local authorities, clubs and sports groups to embed safety in sports education and practice
- Government should consider setting up advisory forums on safety in riskier outdoor pursuits, such as mountaineering.

[1] National Water Safety Forum, *WAID UK 2023 Summary for the NWSF* (2024), p. 2.

[2] There is limited research into the link between swimming competence and drowning; anecdotally, it appears that many people who drown are capable of swimming, though to what degree and how much experience they have in natural water is not well understood.

[3] Note that World Health Organisation has published *Preventing Drowning: An Implementation Guide* (Geneva, 2017).

[4] Michael Goodier, 'England Has Lost Almost 400 Swimming Pools Since 2010', *The Guardian*, 12 March 2023.

[5] See, for instance, DWF, *Review of the Legal Responsibility for Beach Safety* (London, 2019).

[6] Kwame Boakye, 'Leisure Sector Still Faces "Widespread Closures" Despite Extra Funding', *Local Government Chronicle*, 17 March 2023; Local Government Association, 'Crisis in Sport and Leisure Centre Funding' (retrieved 24 September 2024).

[7] Sport England, 'Swimming Pool Support Fund Keeps Leisure Centres Afloat', 4 November 2023.

CHAPTER 09

Future challenges

Future challenges

Any good strategy must be alert to future problems. While the UK's accident crisis has been years in the making, there are several emerging challenges on the horizon which are likely to make things worse, if they aren't managed properly. These are big, systemic issues and their impacts don't stop with accidents; however their likely impact on accident rates will compound what is already a costly and damaging problem.

This chapter outlines three emerging risk areas which RoSPA believes will make accident rates worse in the future. The first of these is climate change. We've already seen how the world heating up is driving extreme weather events in the UK – from flash flooding to heat waves, from wetter springs to erratic winters. Flooding contributes towards drowning risk, especially among drivers. Hot weather will increase the risk of heat exhaustion and also drive more people to enter natural water, increasing the risk of drowning. And icy winter storms can increase the risk of injuries from falls on ice and exposure to the elements. These are just some of the ways that climate change can impact accident rates and we need to have a strategy in place that addresses them.

The next emerging area is artificial intelligence, including its use in autonomous vehicles and machines. On the one hand, AI has the potential to help companies and researchers to analyse accident and near-miss data and learn from this to recommend interventions. This could achieve more insightful analysis than would be otherwise possible by discerning complex trends which humans cannot identify without automated processes. While these systems would need human oversight, must be carefully designed and need to be built with ethical considerations in mind, we think they have potential to improve safety. However, AI is also increasingly being used in autonomous vehicles and machinery; while this opens up a host of possibilities, it also has the potential to create new types of risks and dangers – and we are alert to rising incident numbers as these technologies are increasingly rolled out. This technology is likely to keep emerging and at a growing pace; UK Government must plan for its impact on safety.

Finally, the UK's aging population will drive accident rates up, unless we intervene to reduce accidents among the elderly. As the next chapter shows, the elderly are the most susceptible to serious accidental injuries; they are more at-risk of accidental injury in the first place, they require longer stays in hospital, they take longer to recover and they often have other underlying health problems. We predict that the UK's population ageing will cause 312,000 additional accident-related hospitalisations annually in the over 65s by the early 2060s – potentially causing £2.1bn of extra costs to the NHS in today's money.

Climate change

The UK Government's own risk assessment states that climate change 'is one of the biggest challenges of our generation and has already begun to cause irreversible damage to our planet and way of life'.[1] That same assessment predicts that by the 2050s, climate change will pose very high risks to health and wellbeing from rising temperatures; very high risks to people and communities due to river and surface flooding; and high risks to people due to coastal flooding.[2]

Heat exhaustion

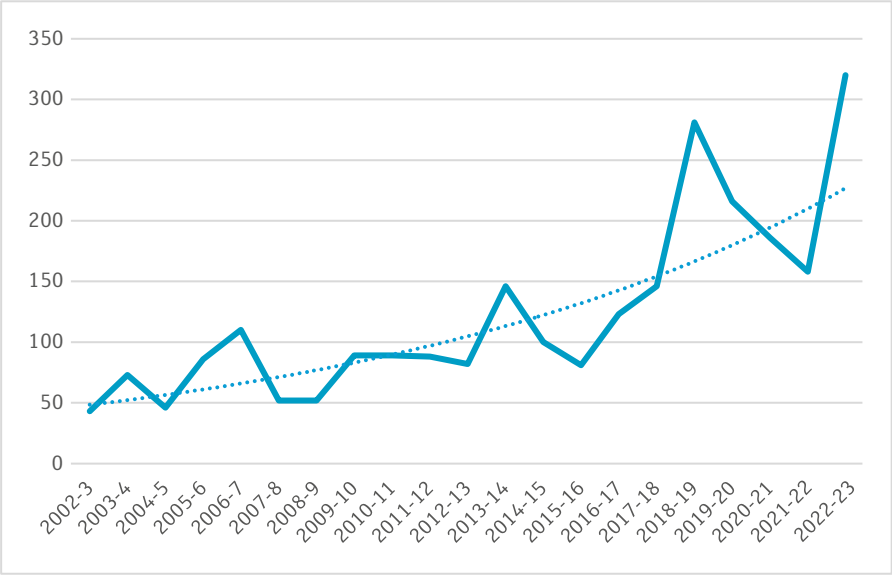
Climate change is expected to cause UK temperatures to rise. We have already seen new temperature records set in recent years and anticipate further extreme heat events in the coming years. The Met Office has reported that:

New analysis of observations shows that extremes of temperature in the UK are most affected by human induced climate change. This means the UK is seeing, on average, more frequent periods of hot weather, bringing challenges for infrastructure, health and wellbeing.[3]

Figure 35 shows that, while the numbers are currently fairly low, there has been a rise in the number of people admitted to hospital due to accidental over-exposure to excessive natural heat. In England, in the five years 2002/3 to 2006/7 there were on average 72 hospital admissions a year due to this. However, in the latest five years (2018/19 to 2022/23), the number of admissions had risen to a yearly average of 232 – more than triple the average in the early 2000s. The trajectory appears to be going in one direction: upwards. And, the number of admissions appears to be rising quickly.

Figure 35: Hospital admissions due to exposure to excessive natural heat, England, 2002/3 to 2022/3

Source: NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23' (retrieved 23 September 2024), for the ICD code X30.



Flooding

Climate change is also driving rising sea levels. Rising sea levels and more extreme weather events caused by climate change are expected to lead to greater flood risk and worse flooding (including higher flood waters). The UK Government has identified that around 6.1m people live in 'flood-prone areas' in the UK. Under a modest 2°C heating scenario, this number of people is expected to rise by 61% by 2050.[4] This has the potential not only to damage property, but also to put people in these areas at risk of drowning. Currently, the number of people killed in the UK as a result of flooding is low. However, given the predicted rise in frequency, scale and geographical scope of future flooding, as well as the rising population, we would expect to see these numbers rise sharply if sea levels do increase as predicted.

Also at risk are drivers. The Government say that 'Just 30cm of moving water is enough to float a car, and by driving through flood water, drivers open themselves up to the risk of being swept away and having to be rescued or getting stranded after their car engine takes in water and stops.'[5] In the UK, someone dies every other year in a vehicle-related flooding incident, often involving people drowning in their cars.[6] Data from the AA shows the number of near misses is very high, with one road in Leicester alone being implicated in 88 vehicle rescues from 2014 to 2018. The same research found that 74% of drivers would risk driving through flood waters.[7]

Indeed, flood fatalities often involve driving. FFEM-DB, a database of flood deaths from 12 European regions covering 41 years (1980–2020), showed that **38% of flood fatalities where location/activity data is known involved people travelling in a car.**[8] Ashley and Ashley (2008) found that 63% of their sample of 4,586 flood fatalities in the US (1959–2005) that had known activities or locations occurred in vehicles.[9] Tragically, most of these deaths are avoidable; as Gissing et al (2023) reported,

A large proportion of [vehicle-related flooding deaths] are preventable and represent an area of collaboration across a range of fields, including emergency services, disaster preparedness, floodplain management, public health, and road safety. The nature of the risk is exacerbated by increases in the frequency and severity of flood events in a warming climate and further urbanization. The nature of vehicle-related flood incidents is multidimensional, consisting of flood hazard, behavioural, vehicle, and road-related factors.[10]

As these authors pointed out, climate change is likely to increase risk of flood-related deaths. The UK Government must plan for this, including the role of vehicles in flood-related casualties.

Colder or wetter weather

Climate change is generally expected to make the UK's winters warmer and wetter.[11] This will make outdoor surfaces more slippery, which will increase the risk of falls or road traffic accidents. Already, in 2022, 14 people were killed, 379 seriously injured and 1,227 slightly injured on Great Britain's roads when there was rain, snow, sleet or foggy conditions.[12] If winters are likely to get wetter and more stormy, we could see this pose added risks to drivers. Government must proactively monitor rates of these types of accident and plan for inteventions to address them.

Although most scientists expect that climate change will make the UK's winters warmer and wetter, as one scientist has put it, climate change is like 'a great planetary experiment, many of the outcomes of which we cannot predict'.[13] It is likely to increase weather extremes and volatility,[14] and some scholars have even theorised that climate change could disrupt the Gulf Stream and actually make the UK much colder in the long run – exposing the country to more freezing weather and extreme cold – though there is much uncertainty over this prospect.[15] There is a link between cold weather and accident rates. As outlined above, on the roads freezing weather can be very dangerous and contributes to hundreds of serious injuries every year already. Additionally, thousands of people are hospitalised every year due to falls on snow and ice. The graphs below (Figures 36 and 37) highlight how these numbers fluctuate in line with the number of snow days in a year. They show that if the UK does experience cold or icy spells, these can drive up accident numbers, especially among the elderly.

These figures show that regardless of whether climate change makes our winters warmer or colder, if the UK ends up experiencing more extreme weather, accident rates are likely to rise and Government will need to consider policy interventions accordingly.

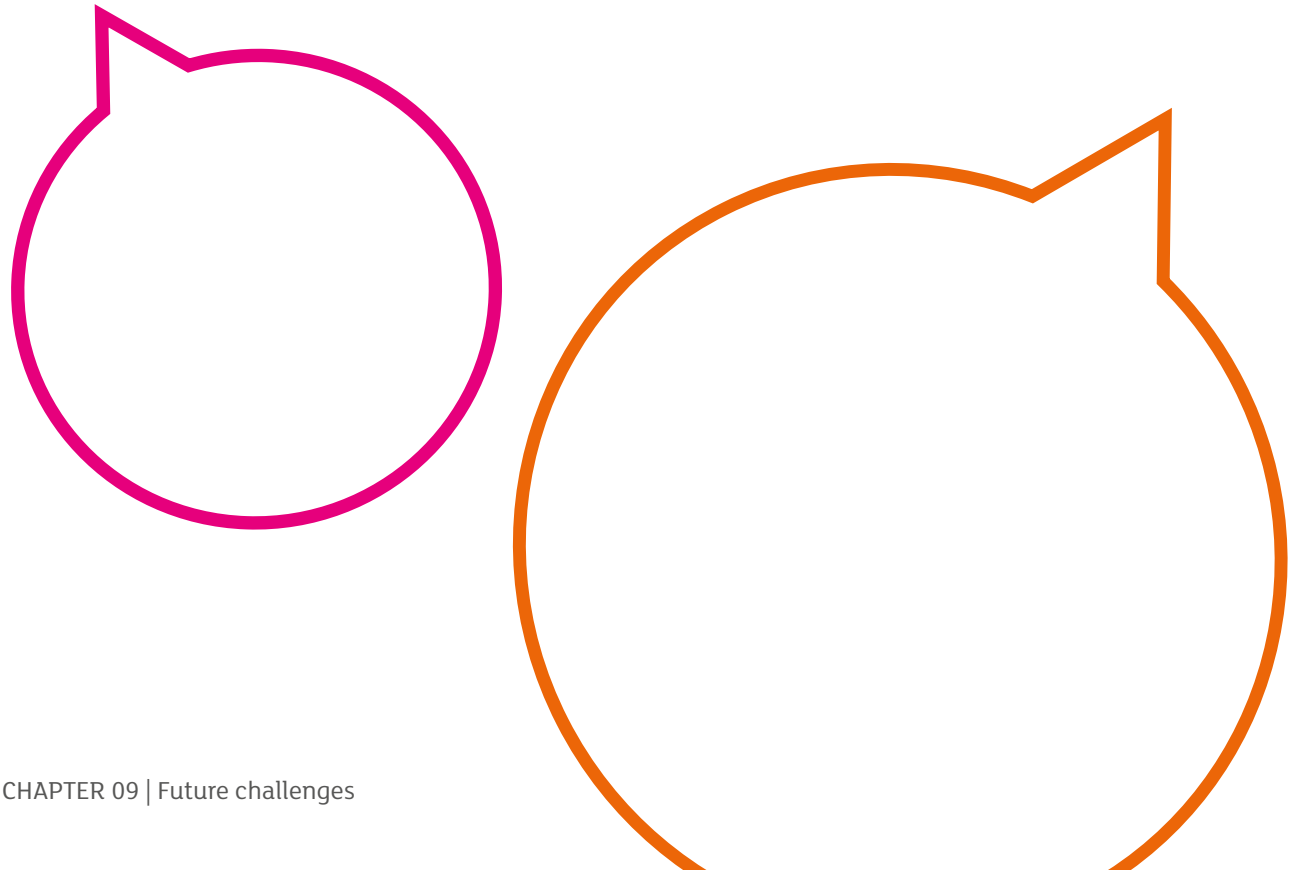


Figure 36: Deaths due to falls on ice and snow, UK, 2002 to 2020, with average annual snow days, UK

Source: ONS, NRS and NISRA, underlying cause of death statistics, 2013 to 2022, analysis of 3-digit ICD code data for W00; and "50 Years of UK Weather", ArcGIS, sourced from UK Met Office's Gridded Climate Observations HadUK-Grid

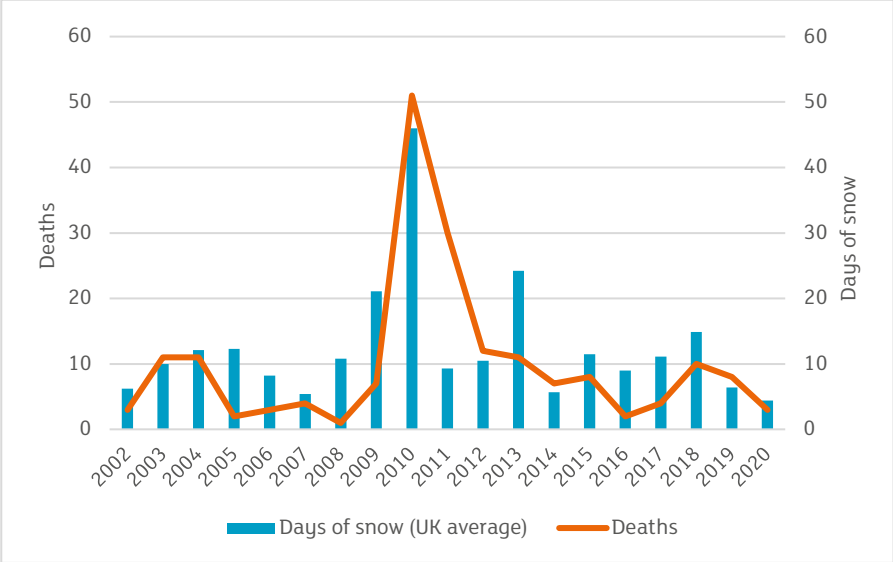
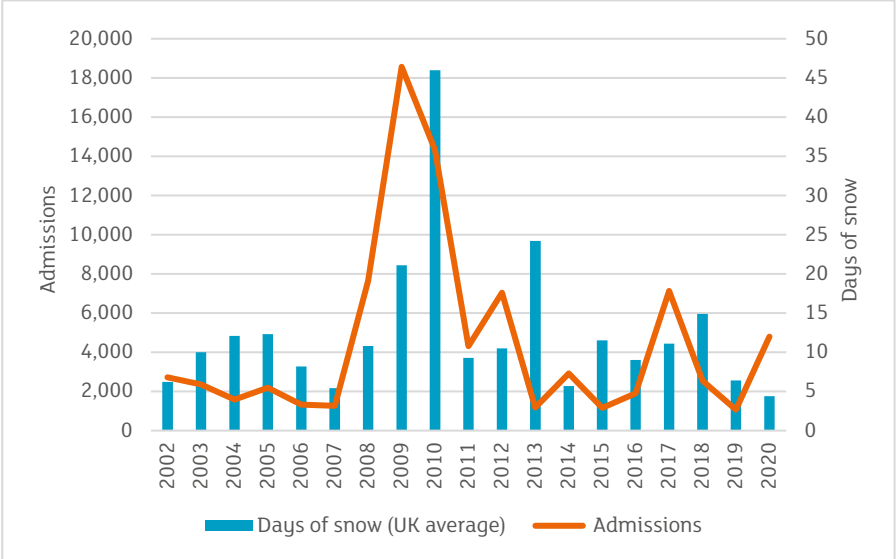


Figure 37: Hospitalisations due to falls on ice and snow, England, 2002 to 2022, with average annual snow days, UK*

Source: NHS England Digital: Admitted Patient Care Activity and earlier Hospital Episode Statistics datasets, 2002/3 to 2022/3, analysis of 3-digit ICD code data for W00; and "50 Years of UK Weather", ArcGIS, sourced from UK Met Office's Gridded Climate Observations HadUK-Grid



* Note, hospitalisation data is for financial year (2002/3, etc), but weather data is for calendar years, which affects the alignment of these two graphs.

Water safety

Finally, if summer temperatures rise, then we would expect to see more people entering water to cool off. However, this doesn't come without risks, as we outlined in Chapter 8. Strong undercurrents, cold water shock, limited swimming competency and numerous other factors can put people at risk of drowning, which is all too often fatal. There is already a spike in drownings over the summer months, with 49% of UK accidental drownings taking place between May and August.[16] If temperatures continue to rise, there is a risk that drowning numbers could rise too.

At-risk groups

In all of these scenarios, certain groups are at particular risk, and a future-facing accident prevention strategy must account for this. The elderly and children are especially susceptible to heat exhaustion, falls and the effects of extreme cold. Vulnerable persons, especially the homeless, are also at risk of exposure to extreme weather. Drownings, meanwhile, can occur among anyone – children are, of course, at particular risk, but we know that men tend to account for a disproportionately higher share of people who drown in the UK, suggesting that behavioural factors need to be accounted for in prevention strategies.

Overall, we recommend that Government do the following to address the impact of climate change on accident rates:

Policy recommendation

- NAPS must be future-facing to account for climate change's potential effects on public health and on accident risks in particular
- Government must monitor accident rates for potential climate-linked effects and make policy interventions accordingly
- Government should commission research and modelling to estimate climate change's potential impact on accident rates.

Artificial intelligence (AI)

What is AI?

Artificial intelligence is a term we've all heard in the press recently – we are in the midst of an 'AI boom'. But what is AI? According to one definition, it's 'the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings', including 'the ability to reason, discover meaning, generalise, or learn from experience'.[17]

We have not yet reached a stage where computers possess the processing power and knowledge to replicate the range of capabilities of the human brain; however, some specific and limited applications of AI are now at the level of human abilities. There are different methods for achieving AI and different types of AI, which have their own applications.

AI and safety: data mining

Data mining – a form of AI which discovers patterns in large datasets using principles like machine learning and neural networks – has powerful potential in health and safety. Using this technology, a computer could process vast amounts of accident and near-miss data to identify potential patterns and thus generate insights for health and safety practitioners. This could be data about road incidents or workplace accidents, for instance. The former could identify accident hotspots; the latter could highlight scenarios where workers are likely to be injured. Whilst a person could find this information eventually, the scale and complexity of the data make it very challenging on a human level – but AI can make this process much quicker and avoid human error.[18]

The EU Occupational Health and Safety Association has highlighted how AI could also be proactively used to monitor workers, for instance through gathering and analysing data on body movements, GPS tracking, stress indicators, vital signs, and telephone and computer use; this can be gathered through wearable monitors or through software in computers. Clearly, some of these applications offer potential, when combined with data mining technology, to provide insights that could reduce workplace injuries.[19] For instance, if there are signs that workers are under stress doing certain tasks, health and safety practitioners can use AI to identify common themes and then look for real-world interventions.

In both applications, AI has potential to support health and safety. However, there are practical and ethical considerations which need to be borne in mind. For instance, when it comes to analysing accident data, an AI may need to be trained and optimised to avoid flagging false positives. It generally will still need a human overseer and human input to interpret the data and consider practical solutions. Following the AI blindly could lead to unforeseen consequences or practical issues.

Secondly, real-world monitoring raises a host of legal and ethical issues, especially relating to privacy and workers' rights. It may lead to increased micromanagement, pressure, competitiveness and social isolation, decreasing morale and harming workers' mental health which – as we saw in Chapter 4 – is a major component of occupational health and safety. So, while monitoring could have OSH benefits, it could also undermine OSH. At the same time, they may feel under added pressure to complete tasks which could mean they avoid taking breaks when required.

We therefore take a cautious view of AI-related worker management technologies. Although we can see how specific applications could boost workers' safety, it is clear that these could be outweighed by the problems arising from wider monitoring regimes. Indeed, this technology could represent significant challenges for OSH.

Autonomous technologies

The rise in autonomous technology has important implications for accident prevention too. Here, we focus on two main areas of development: autonomous vehicles and autonomous machinery. Self-driving vehicles are a fast-emerging area of development. The standards organisation SEA International has defined different levels of automation: [20]

- Level 0 – no automation, with the driver controlling all aspects of driving. Warning or intervention systems can be incorporated into this level if the driver remains in complete control.
- Level 1 – driver assistance, with Advanced Driver Assistance Systems (ADAS) supporting either steering or speed.
- Level 2 – partial automation, where a driver assistance system controls speed and steering, though the driver maintains responsibility for monitoring and fallback control.

- Level 3 – conditional automation, where all aspects of driving are controlled by an ADAS, but the driver must respond to a request to intervene and thus retains responsibility for fallback; automation is used in a specific mode for driving.
- Level 4 – high automation, where all aspects of driving are controlled by an ADAS, but the car can stop safety if the driver does not respond to a request to intervene; automation is used in a specific mode of driving. The system therefore has responsibility for fallback.
- Level 5 – full automation, where all aspects of driving are controlled by an ADAS and the system controls the vehicle under all conditions: there is no human driver.

To date, no car has reached Level 5, but a small number of Level 4 vehicles are available in some markets. Other levels are increasingly entering the market.

Fully automated vehicles could offer opportunities for improving road safety by removing from the driving process various forms of human error or dangerous driving behaviour (like drink driving or speeding). Given that human error is thought to have a contributory role in around 90% of road crashes, it is likely that fully autonomous driving would see a sharp reduction in incident rates on the roads.[21] At the same time, there are also significant mobility benefits for young people, the elderly and the disabled.

However, it is clear that the technology is not fault-proof. While some experts predict that autonomous vehicles have the potential to reduce incident rates to 'near zero', nobody is pretending that they would completely eliminate injuries or fatalities. There are also concerns around an over-reliance on technology at a time when full automation does not exist, but partial automation is being rolled out: drivers may not pay much attention to the 'driving' role if their main job becomes that of a 'system supervisor' and they expect the car to do almost all of the work; their situational awareness may decline. One Swedish study found that night drivers were more likely to have issues with sleepiness if they were driving partially automated vehicles. There may also be a skills issue in the long term, if people become less used to actively driving. An irony of automation is that it often tends to pass the easiest tasks to computers, leaving humans to deal with the most complex driving tasks (e.g. rapidly responding to dangerous scenarios), when it is often in these most dangerous scenarios that humans err.[22]

These issues, of control, disengagement, skill, task allocation and situational awareness, present a dangerous mix when autonomous vehicles interact with vulnerable road users like pedestrians and cyclists. If partially or highly automated self-driving cars are involved in sudden, unpredictable, complex and dangerous scenarios which the computer cannot handle, the human driver will be left to deal with the situation – but, if drivers are less skilled or less engaged, then they may actually pose more risk to the other road users. Machine-to-human transitions are therefore potentially highly dangerous situations; some experts have suggested that the later levels (e.g., 3 and 4) before full automation should be skipped over for this reason, while others suggest that systems need to promote drivers' ongoing engagement; there are practical questions raised by either view.

Finally, in practical terms, autonomous vehicles have a long way to go before full automation: despite all the improvements, there is still much to do before they can detect pedestrians, cyclists, other driven vehicles and other hazards. There is likely to be a time when various types of autonomous vehicle will be sharing the road with each other and with non-autonomous vehicles. This raises a host of potential safety concerns. For instance, a lot of driving involves non-verbal and informal communication between drivers/riders, while also relying on informal conventions and learned experience of particular routes or scenarios; autonomous vehicles would not utilise or understand these informal 'rules' and communication protocols, which is likely to put more vulnerable road users at greater risk.

These sorts of challenges highlight the enormous journey we will need to go on as driverless vehicles are rolled out. The UK's adoption of the Autonomous Vehicles Act 2024 establishes in law the core concepts around AVs, removes legal ambiguities or obstacles, and provides a framework for new regulations to be made for a host of areas in connection with them. These include vehicle approval, licensing and investigation of incidents. The exact content of these future regulations will be consulted on over the coming years, though the previous Government announced that AVs could be permitted on English roads as early as 2026.

At RoSPA we welcome the development of new regulations for AVs and recognise the need for rules which allow for innovation while protecting the public. This is always a complex balancing act, but it is imperative that any new regulations ensure that AVs are as safe as possible – we cannot be in a situation where AVs are causing preventable deaths due to weak regulations. This is an opportunity, and a rare one, to be ahead of the curve and proactively shape the UK's response to one of this generation's defining road safety challenges. A National Accident Prevention Strategy must take this fully into account and chart a path forward.

Policy recommendation

- Government must make the most of this opportunity to create a robust set of regulations for autonomous vehicles; these must have safety at their heart, not just of drivers but of all road users including pedestrians and cyclists
- A national monitoring and reporting system should be set up to log incidents involving autonomous machines and autonomous vehicles
- As part of a NAPS, Government must look not only to regulate AVs, but to create a forward-looking plan for how they will coexist with other users, focusing on the three 'E's: enforcement, education and engineering.

Finally, like autonomous vehicles, we are also aware that more and more autonomous machinery will find its way into our workplaces and, most likely, into our homes. These have the ability to replace labour-intensive and dangerous jobs, which could help to drive down accident rates in some of the most accident-prone sectors like construction and agriculture, while also reducing human labour in smaller scale domestic applications. The potential health and safety benefits, not to mention productivity improvements, are therefore substantial.

However, as with autonomous vehicles, autonomous machinery can pose its own risks. Malm et al. (2022) have enumerated 17 different types of risk, including: sensor error or failure causing situational awareness issues; difficulties detecting falling objects, vibrations, hazards and other problems; brake or stopping failure; cybersecurity risks; system failures; update issues; software design flaws; and data corruption. Where machinery is also mobile, it has a range of additional hazards, including the autonomous machine becoming stopped in position, causing it to overheat; electrical hazards from accidentally coming into proximity with cables; and further issues with situational awareness.[23] It's likely that these types of flaw or failure could cause human injury, especially given the potential scale of the machines being used. Additionally, other researchers have raised concerns over potential gaps in the legal and moral responsibility for harms caused by autonomous machinery, which may create further practical issues around accountability. [24]

Human oversight and intervention can help to manage some of these risks – though, of course, humans can err too, and also have a tendency to take risks and sometimes to disobey rules; autonomous systems

will need to factor in these behaviours too. As with driving, it is clear that there are both opportunities and challenges. Any future strategy must recognise this emerging technology and the risks they pose to people. There needs to be a regulatory framework for dealing not just with driverless cars, but with semi-autonomous and autonomous machines of all types, to ensure that they are as safe as possible. A regulatory system would also need to ensure that there is a means of reporting incidents, something which the Centre for Long-Term Resilience has actively called for.[25]

Policy recommendation

- Government must adopt a robust regulatory environment for autonomous machinery, including testing and licensing, which will ensure that it is safe and guidance is in place for employers and users on how to use machinery safely
- A national monitoring and reporting system should be set up to log incidents involving autonomous machines and autonomous vehicles.

Ageing population

The UK's population is ageing – that's no surprise to most people. However, the impact on accident rates, and their costs, are often overlooked in public discussions around the consequences of this demographic trend. To outline the situation, it helps to offer a few statistics from the Centre for Ageing Better:[26]

- Since 1981, the number of people aged 50 in the UK has increased by 47% (this is an additional 6.8 million people in this age bracket)
- More than 10 million UK residents are now aged 65 or over, equating to almost 1 in 5 people.
- Over the next 40 years, the number of people aged 65 to 79 is expected to rise by 30%, and the number of people aged 80 or above is set to double
- At the same time, the number of under 20s is predicted to fall over the next 40 years.

This has striking implications for future accident rates. As we will see in the next chapter, older people have the highest per capita accident rates. They account for most deaths and hospitalisations caused by accidents. This is because they are more likely to have an accident, be frail and suffer from illnesses which make the effects of accidents more severe and recovery worse. As a result, a rising number and proportion of older people in the UK will lead to a rise in the number of serious accidents, unless measures are introduced to reduce accident rates in this cohort.

We have used these statistics from the Centre for Ageing Better to predict future accident levels among older people. Our work shows that:

- We expect there to be an ***additional* 312,000 hospitalisations** for accidents among the over 65s in England alone by the mid-2060s [27]
- We estimate that these could take up **2.3 million extra bed days**[28]
- Creating an *additional* cost to the NHS of **£2.4 billion** in 2021 prices[29]

This has enormous implications for public finances. It implies a significant future funding shortfall in the NHS and a long-term additional cost to it. Although these figures are predicted by the mid-2060s, we should not ignore them now: this is the culmination of a trend that is already underway. It is also worth remembering that the elderly population is not evenly distributed around the UK. In many local authorities, especially in rural and coastal areas, a third of the population is over 65 today. In these areas, accident rates will already be higher, and they are only going to get worse.

The only way to avoid these additional costs is to sharply reduce the rate of accidents among older people, by at least 42% in the over 65s combined (including by 50% in the over 80s). And that is just to stand still. [30]

Policy recommendation

- To alleviate future additional pressures on the NHS, Government must urgently implement a strategy to reduce accident rates among the over 65s, with a view to reducing the per capita rate of accidental deaths and accident-related hospital admissions in this cohort by over 42% by the 2060s (with a 50%+ decrease in those aged 80 or over).

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[1] HM Government, *UK Climate Change Risk Assessment 2022* (London, 2022), p. 3.

[2] *Ibid*., p. 10, table 1.

[3] Met Office, 'Temperature Extremes and Records Most Affected by UK's Changing Climate', 25 July 2024.

[4] UK Health Security Agency, *Health Effects of Climate Change (HECC) in the UK: 2023 Report*, chap. 3, p. 2

[5] Environment Agency, 'Driving Complacency: 74% of Drivers Would Risk Life in Flood Water', 19 December 2019.

[6] Based on bespoke analysis of the National Water Safety Forum's WAID database for the 6 years 2018 to 2022.

[7] Environment Agency, 'Driving Complacency: 74% of Drivers Would Risk Life in Flood Water', 19 December 2019.

[8] CNR IRPI, National Research Council-Research Institute for Geo-Hydrological Protection, Italy: 'FFEM-DB (Database of Flood Fatalities from the Euro-Mediterrranean Region)', via 4TU.ResearchData (2022).

[9] Sharon T. Ashley and Walker S. Ashley, 'Flood Fatalities in the United States', *Journal of Applied Meteorology & Climatology*, vol. 47, no. 3 (2008), p. 813. Another US analysis showed that over 50% of flood fatalities between 1985 and 1997 involved people dying in cars or trucks: Robert Henson, 'U.S. Flash Flood Warning Dissemination via Radio and Television', in Eve Gruntfest and John Handmer (eds), *Coping with Flash Floods*, NATO Science Partnerships, vol. 2 (Dordrecht, 2001), pp. 248–249. Another US study showed that out of 190 fatalities in 16 flash floods, 80 involved drowning in automobiles: Jean French et al., 'Mortality from Flash Floods: A Review of National Weather Service Reports, 1969–81', *Public Health Reports*, vol. 98, no. 6 (1983). Han and Sharif (2020) found that 58% of flood-related fatalities in Texas between 1959 and 2019 involved vehicles: Zhongyu Han and Hatim O. Sharif, 'Vehicle-Related Flood Fatalities in Texas, 1959–2019', *Water*, vol. 12, no. 10 (2020).

[10] Andrew Gissing et al., 'Vehicle-Related Causes of Flood Fatalities', in Djillanli Benouar et al. (eds), *Oxford Research Encyclopedia of Natural Hazard Science (Oxford, 2023)*.

[11] Met Office, 'Effects of Climate Change' (retrieved August 2024).

[12] RoSPA, 'Winter Driving Safety' (retrieved August 2024).

[13] Bill McGuire, 'Will Global Warming Trigger a New Ice Age?', *Yale Global Online*, 13 November 2003 (Yale University).

[14] Met Office, 'How is Climate Linked to Extreme Weather?' (retrieved August 2024).

[15] For instance, see Georgina Rannard, 'Will the Gulf Stream Really Collapse by 2025?', *BBC News*, 26 July 2023, and Bill

McGuire, 'Will Global Warming Trigger a New Ice Age?', *Yale Global Online*, 13 November 2003 (Yale University).

[16] Royal Life Saving Society UK, 'Drowning Facts' (retrieved 3 October 2024). See also: Royal National Lifeboat Institution, 'RNLI Reminds Everyone to Stay Safe on World Drowning Prevention Day', 24 July 2024.

[17] B. J. Copeland, 'Artificial Intelligence', in *Encyclopaedia Britannica* (retrieved August 2024).

[18] RoSPA, 'Game Changer?: How AI Could Transform Workplace Safety' (retrieved 3 October 2024).

[19] European Agency for Safety and Health and Work (EU-OSHA), *Impact of Artificial Intelligence on Occupational Safety and Health* (Bilbao, 2021).

[20] RoSPA, *Road Safety Factsheet: Autonomous Vehicles* (Edgbaston, 2021).

[21] *Ibid.*

[22] *Ibid*. There are also issues around data security, potential for hacking, and privacy.

[23] Timo Malm, et al., 'Safety Risk Sources of Autonomous Mobile Machines', *Open Engineering*, vol. 12, no. 1 (2022), pp. 977–990.

[24] For instance, see Frank Hindriks and Herman Veluwenkamp, 'The Risks of Autonomous Machines: From Responsibility Gaps to Control Gaps', *Synthese*, vol. 201 (2023), article no. 21.

[25] Dan Milmo, 'UK Needs System for Recording AI Misuse and Malfunctions, Thinktank Says', *The Guardian*, 26 June 2024.

[26] Centre for Ageing Better, *Homes: The State of Ageing 2023–24* (retrieved 3 October 2024).

[27] Assuming the underlying rate of hospitalisations among the over 65s stays the same, we have obtained this estimate by multiplying the current number of admissions among those aged 65 to 79 (170,869) by 1.3 (equating to 222,129) and multiplying the current number of admissions among those aged over 79 (260,725) by 2.0 (equating to 521,450), yielding a total of 743,579 admissions among those aged 65+ in the early 2060s; less the current total (431,594), this means 311,985 extra hospital admissions. For the current numbers, see Appendix 2, Table 3.1.

[28] Reaching this figure involved analysing NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022–23'. At the 3-digit ICD code level (in the ranges V01-X59 and Y85-Y86), we multiplied the total admissions for each code among those aged 65–79 and 80+ by the mean bed days for each 3-digit code; we then summed these to reach an estimate of total bed days for each cohort: 1,166,932 for those aged 65 to 79, and 1,959,774 for those aged 80+ (a combined 3,126,706). Assuming that the underlying rate of admission will stay the same over time, we then estimated the future admissions by multiplying these totals by 1.3 (for the 65–79 cohort; yielding an estimate of 1,517,011 bed days in the 2060s) and by 2 for the over 80s total (equating to 3,919,548 estimated bed days), totalling 5,436,559. Less the current figures, this indicates that there will be 2,309,853 extra bed days. The weakness of this analysis is its reliance on mean bed days for each accident category, which is the mean across all ages; it is likely that older cohorts experience longer stays in hospital on average, so these estimates will likely be an undercount.

[29] Reached by multiplying the additional bed days estimated by the average cost per bed day in 2021 prices is £1,032.09 (see Appendix 3 for sourcing).

[30] This would be the rate of reduction needed by the early 2060s so that the total number of admissions stays at 2022/3 levels given the enlarged older population.

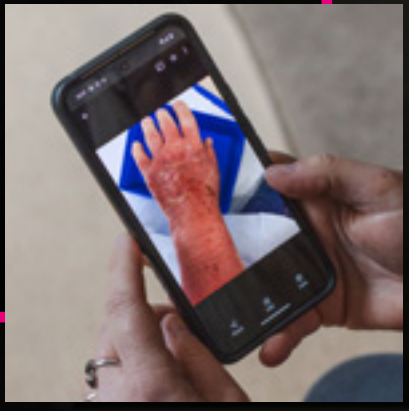
Case study

Carly, 37, is a carer living in Northamptonshire. She says:

Cooking a roast chicken, I poured oil in a roasting tin and placed it in the oven to heat. A few minutes later, without thinking I grabbed a tea-towel to retrieve the hot tin from the shelf and somehow my hand fumbled, the tin fell and boiling hot oil covered my left arm.

The pain took a second to register before I screamed out loud. I called my brother-in-law James who is a paramedic. My arm was already red and swelling and he advised me to keep it under cold water for half an hour, bandage it and go to A&E. I'm afraid I ignored his advice as I was due to go on holiday. I stocked up on painkillers but my arm was swelling to two or three times its size and seeping. By the time I got home, I realised I couldn't waste any more time and went to A&E.
At the hospital the nurse said she would have to debride the burn, clearing up all the dead bits of skin. That was almost more painful than the burn itself. But she bandaged it up and said I'd need to keep having the dressing changed every two days at the GP.

I had to take two weeks off work which meant I wasn't paid and my colleagues had to cover my care shifts. I struggled to drive, which meant roping in friends and school mums to help me get the children to school and meant I had to order food online. I was also really nervous about cooking and consequently we ended up having more takeaways – costly in both a health and finance sense. I found it incredibly difficult to even do simple things like showering or washing up for several weeks.



CHAPTER 10

An inclusive strategy

An inclusive strategy

The National Accident Prevention Strategy needs to be inclusive. It will not succeed if it does not recognise that accidents occur differently in different groups. A one-size-fits-all approach risks marginalising some communities and worsening health inequalities. NAPS must account for how deprivation, gender, ethnicity, age, disability and place affect accident rates – and how these factors intersect.

This chapter outlines what we know about accidents and inequalities today, highlighting in some cases clear evidence for action, in other cases the need for better research, data or strategic planning.

Policy recommendation

- Implement a National Accident Prevention Strategy which accounts for inequalities caused by factors such as deprivation, gender, age, ethnicity and the urban–rural divide
- Publish already-collected data on hospital admissions for accidents by deprivation decile and ethnicity; publish data on causes of death by deprivation decile.
- Commission research into the rate of accidental deaths among different economic and ethnic groups
- Use these new data sets and the data in this report to make targeted and inclusive accident prevention policy interventions.

Deprivation

Sadly, but not unsurprisingly, the most deprived communities tend to suffer from the highest rates of death and injury due to accidents. For instance, in Scotland, death rates due to unintentional injuries were 96% higher than the Scottish average in the most deprived areas, and 50% lower in the least deprived areas.[1] Research from Northern Ireland shows that children living in the most deprived parts of Belfast were more likely to be injured by falls, scaldings and burns.[2] A study of childhood deaths in England and Wales from 1981 to 2001 found that children of the long-term unemployed were 13 times more likely to die from external causes (including accidents) than children of managers and professionals. This disparity between children from different family backgrounds was even worse when the children were involved in accidents as pedestrians (those from households with long-term unemployed parents were 21 times more likely to be killed in these scenarios than children from managerial or professional families) or cyclists (28 times more likely) or killed by fires (38 times more likely).[3]

A similar link has been demonstrated in road accidents. In London, the more deprived an area is, the higher the risk that a person in that area will be killed or seriously injured there: the 30% most deprived areas had twice the rate of casualties per kilometre as the least deprived 30%.[4] Data from Glasgow suggests that this is not unique to London: there, the road accident casualty rate was 41% lower for the least deprived 20% of residents than the most deprived, and hospital admission rates for adults involved in road traffic accidents were 'consistently higher' for more deprived groups compared to less deprived groups.[5] A study of children injured in road accidents in Northern Ireland found a similar link.[6]

More generally, socioeconomic deprivation is often associated with a range of health inequalities. There is strong evidence that people living in deprived areas are more likely to have long-term illnesses and comorbidities;[7] and they are more likely to be overweight and inactive.[8] These factors can impact the severity and the recovery time associated with an accidental injury. However, deprivation is not just associated with earlier death in adults; staggeringly, a child living in one of the 20% most deprived areas is 2.6 times more likely to die in childhood in England than a child living in the 20% least deprived areas.[9] This points to the need to have targeted and inclusive approaches to accident prevention which acknowledge general health inequalities and the specific inequalities associated with certain types of accidents. The challenge here is that, although the NHS and the national registrars-general collect the data that could allow us to map accident rates against deprivation indices (e.g. deceased/patient address and injury type), neither the UK nor most of the four nations' governments publish summary tables, making targeted interventions challenging.

Gender

Men and women are injured or killed in accidents at different rates. In the decade 2013 to 2022, 40% more UK men were killed as a result of accidents than women.[10] However, in England accident-related hospital admission rates are very similar,[11] suggesting men tend to be more often involved in more of the most serious accidents that end up being fatal and/or have underlying characteristics which worsen the outcome.

On the road

Our research shows that men were killed 3 times more often in road accidents than women across that decade. Table 1 shows how men are especially overrepresented in fatal accidents involving motorcycles, vans, air transport and water transport.

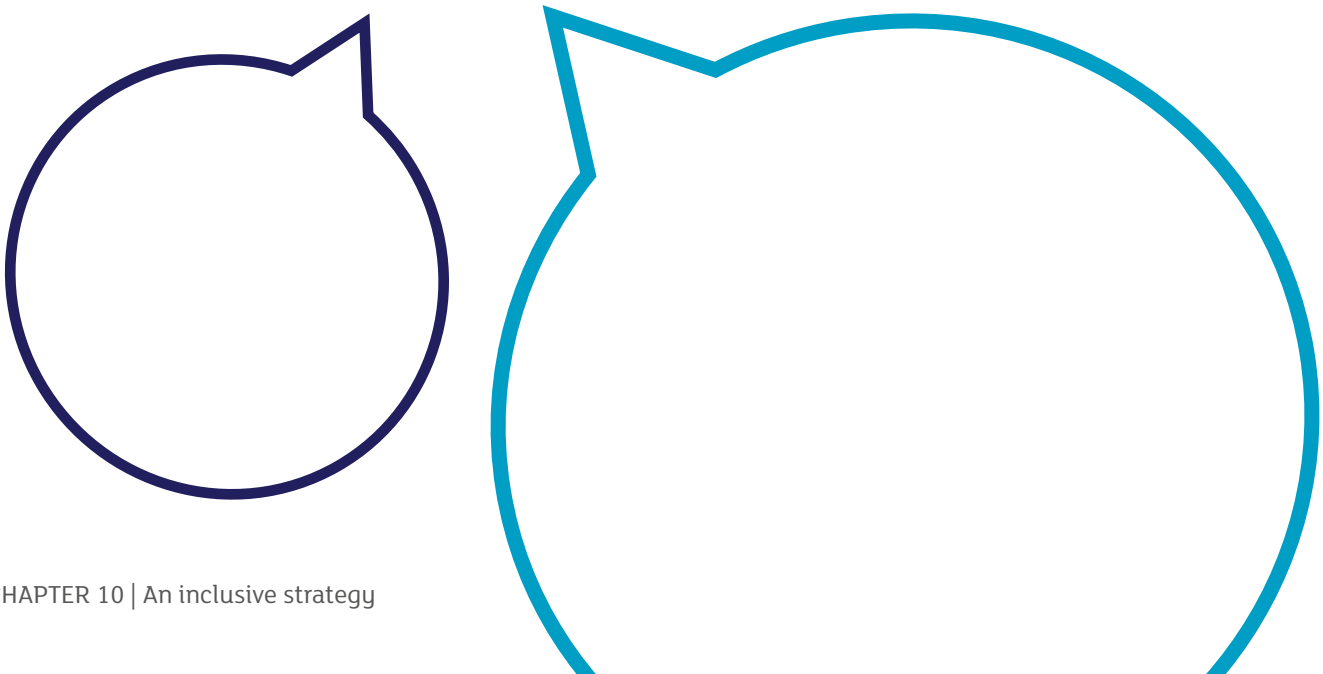


Table 1: Ratio of males to females killed in transport accidents, 2013 to 2022

Source: Appendix 1, Tables 6.1 and 6.2

Type	Ratio of males to females killed, 2013 to 2022
All transport accidents (TAs)	**3.0**
Pedestrians injured in TAs	2.2
Pedal cyclists injured in TAs	6.9
Motorcycle rider injured in TAs	18.5
Occupant of three-wheeled motor vehicle injured in TAs	2.8
Car occupant injured in TAs	2.3
Occupant of pick-up truck or van injured in TAs	9.6
Occupant of heavy transport vehicle injured in TAs	55.5
Bus occupant injured in TAs	1.7
Persons injured in other land TAs	2.7
Persons injured in water TAs	7.8
Persons injured in air and space TAs	8.1

As Table 2 shows, when it comes to hospital admissions, last year men were admitted following transport accidents twice as often as women – with much higher rates for motorcycle, heavy transport, van, cycling and air transport accidents. However, women were 40% more likely to be admitted for injuries caused while riding a bus.

Table 2: Ratio of males to females admitted to hospital following transport accidents, 2013 to 2022

Source: Appendix 2, Table 5

Type of individual injured in transport accident	Ratio of males to females hospitalised, 2022/3
All transport accidents	**1.9**
Pedestrians injured in TAs	1.5
Pedal cyclists injured in TAs	4.1
Motorcycle riders injured in TAs	11.2
Occupants of three-wheeled motor vehicle injured in TAs	1.5
Car occupants injured in TAs	1.1
Occupants of pick-up truck or van injured in TAs	4.2
Occupants of heavy transport vehicle injured in TAs	12.1
Bus occupants injured in TAs	0.6
Persons injured in other land TAs	0.5
Persons injured in water TAs	1.9
Persons injured in air and space TAs	3.2

The reasons for this are complex. Bus ridership is 30% higher for women, which may be why they are overrepresented in bus-related accidents;[12] but fatalities among bus riders are rare due to the size of the vehicle. By contrast, the sorts of jobs that require heavy transport or involve van-driving are male-dominated, though heavy-vehicle drivers involved in a collision are unlikely to be fatally injured. Likewise, motorcycle riders are predominantly male – data from the Scottish Government showed that 85% of motorcycle journeys were by men[13] – but they are much more vulnerable road user, as we saw in Chapter 5.

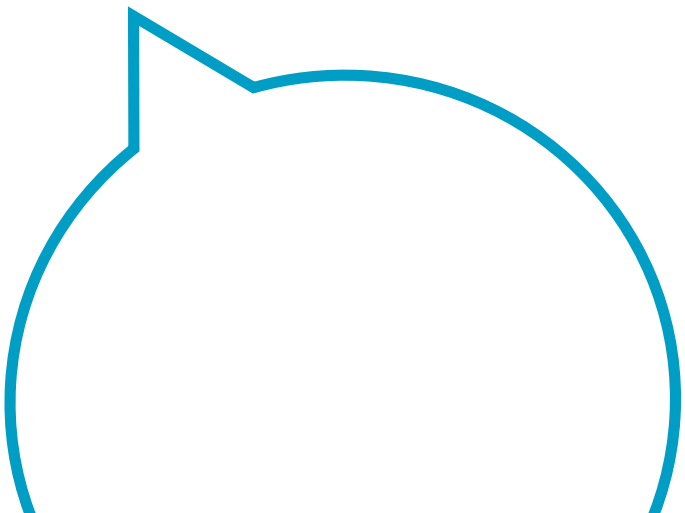
However, while these preponderances towards vehicle types can explain some of the variation, there is a wider gender-based trend at play. Aldred et al. (2020) found that men were far more likely to injure other road users than women, on a per km travelled basis: double for all male drivers and up to 10 times higher for motorcycle riders.[14] In 2022, *The Guardian* found that male drivers are 3 times more likely to be involved in a road collision that kills or injures a pedestrian; the gap between men and women has grown over the last decade.[15] These points suggest wider behavioural issues, which may also underpin men's higher injury rates on the road. Research by Brake shows that 30% of surveyed men admitted to driving at 100mph compared to 9% of women. As Brake's CEO said, 'We've found in previous research that males are more likely to risk-take, for example by speeding'.[16]

Other accident types

Over the last decade, 29% more men than women died in the UK in non-transport accidents. Men were especially more likely to die more often in accidents involving electric current, radiation and extreme temperatures (10.2x more frequent), exposure to inanimate mechanical forces (3.4x), accidental drownings (3x) and accidental poisoning (2.5x).[17] Indeed, it's well-known that accidental drug and alcohol related deaths occur more frequently among men.[18] These trends have been broadly stable over the decade 2013 to 2022. When it comes to hospital admissions, men were also much more frequently admitted to hospital for accidents involving inanimate mechanical forces (+93%), accidental drowning (+76%), exposure to smoke, fire and flames (+78%) and overexertion/privation (+65%).[19]

However, women were killed more frequently in accidents involving exposure to heat and hot substances (+35%) and overexertion or privation (+52%) – though they were less frequently admitted to hospital following these sorts of accidents than men were (the only exception being accidental poisonings, which were just as common among men and women).[20]

These results highlight how reducing the rate of these types of serious accident requires understanding gender disparities in their frequencies and the reasons for this. Interventions may need to be targeted and the reasons for men being more likely to suffer serious injury or death in these cases may need more investigation.



Women and falls

While more men than women died due to non-transport accidents, more women than men were admitted to hospital in England for them last year (+8%). This was due to their greater tendency to be admitted for falls (+32%), the category which made up two thirds of non-transport accident admissions (there were 273,230 women admitted due to falls). 4% more women than men died due to falls over the last decade in the UK – one of only 3 types of accident which resulted in more accidental deaths among females.[21]

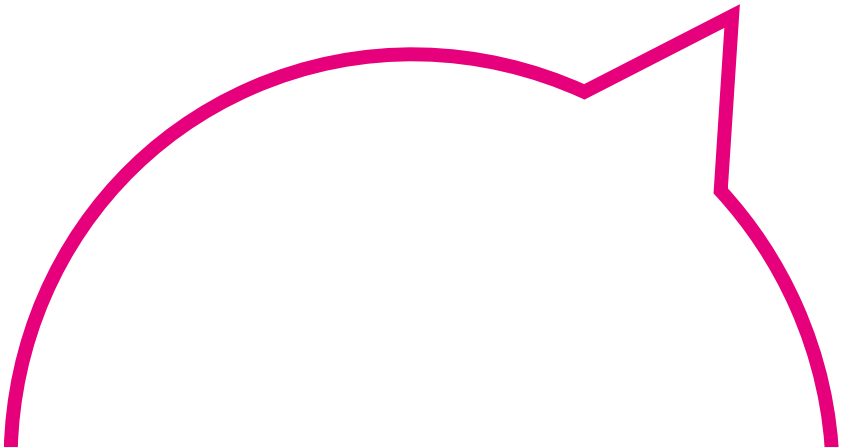
The reasons for this are complex. Firstly, there are some scenarios where men can be at risk of serious falls – they tend to work in more dangerous sectors (see below) and men are still more likely to carry out tasks at home like climbing a ladder or clearing a roof which can lead to serious injury if they fall. However, it's better to recognise that men and women suffer from different types of falls, and that the types of falls women suffer coupled with their physiology can make them more prone to serious injury. This is not just a UK trend. A US study found that women accounted for over 70% of over 65s treated for non-fatal injuries.[22] This tendency is closely related to the fact that hormonal changes in post-menopausal women can lead to osteoporosis and reduced bone density, which the NHS says make women more at risk of complications from a fall.[23] Given that most serious falls occur in older people, it is not surprising that women are disproportionately represented in fall-related hospital admissions and, to a lesser degree, fatalities.

At work

Workplace injuries are highly gendered too. In 2022/23, 96% of fatal injuries at work were to male workers.[24] This likely reflects the fact that fatal workplace accidents occur in male-dominated sectors – last year, 33% were in construction, 15% in agriculture and fishing and 11% were in manufacturing.[25] For instance, in construction, only around 1% of tradespeople (those most often working on building sites) are women.[26]

This does not mean that women are not likely to be injured at work. The rate of non-fatal injuries among men is 22% higher than women (per capita), but it is still the case that 1.5% of female workers were injured at work last year, compared to 1.8% of male workers.[27] We know that women face particular challenges in relation to workplace safety, especially in male-dominated sectors. For instance, research by the National Association of Women in Construction (NAWIC) found that almost 60% of surveyed women had been forced to wear PPE designed for men, which could be ill-fitting and even introduce potential hazards.[28] It is a legal requirement for employees to provide properly fitting PPE, but our analysis shows that HSE has issued only 20 improvement notices for ill-fitting PPE over the last five years – highlighting a major gap in enforcement.[29] Although guidelines state that PPE should account for protected characteristics, this is not mentioned in the actual regulations, nor is 'ill-fitting' PPE clearly defined, making enforcement challenging.

Issues like this highlight the need for a more inclusive approach to health and safety practices, which recognises the differing needs of men and women in the workplace.



Ethnicity

There is emerging evidence that accident rates vary between ethnicities, suggesting the need for a targeted and inclusive approach, and for greater research into this understudied area.

For instance, researchers have found that Black Londoners were 30% more likely to be injured on the city's roads than White residents.[30] Similar trends have been identified nationally. Research shows that differential accident rates associated with ethnicity intersect with and are amplified by deprivation levels. In one study, the rate of non-White ethnic minority pedestrians from deprived areas injured in road traffic accidents was 29% higher than similarly deprived White residents; but, for those living in less deprived areas, the overall rate was much lower and the differential between ethnic minority and White pedestrians fell by a third.[31] The study reported that 'deprivation plays a significant role in the likelihood of a pedestrian being injured in a collision, and that being from an ethnic minority plays an additional part.'[32]

The causes of this inequality along ethnic lines are nevertheless poorly understood, and the impacts across all accident types are essentially unknown. Most studies have focused on specific kinds of transport accidents and are either geographically limited or age-cohort focused. As one London-based study noted, 'Ethnic differences in injury rates cannot be explained by minority ethnic status or area deprivation' alone, '…but are likely to result from the complex ways in which ethnicity shapes local experiences of exposure to injury risk.'[33] This is highlighted by differentials between, for instance, injury rates among Black pedestrians and Asian pedestrians.[34] However, there is limited data and research into the effects of ethnicity on accident rates more broadly, especially in accidents that are not transport-related.

As with deprivation, the UK Government does not publish data around accident-related hospital admission rates broken down by patient ethnicity, despite ethnicity data being captured for hospital admissions in the NHS's Hospital Episode Statistics in England and equivalents in the other nations.[35] The NHS should publish data on accident-related admissions by ethnicity and examine the robustness of this data. Ethnicity data is not captured on death certificates, but Government should commission research into the differential rates of accidental deaths by ethnicity, deprivation and other factors to better understand trends and inform future policy work.

Age and lifestage

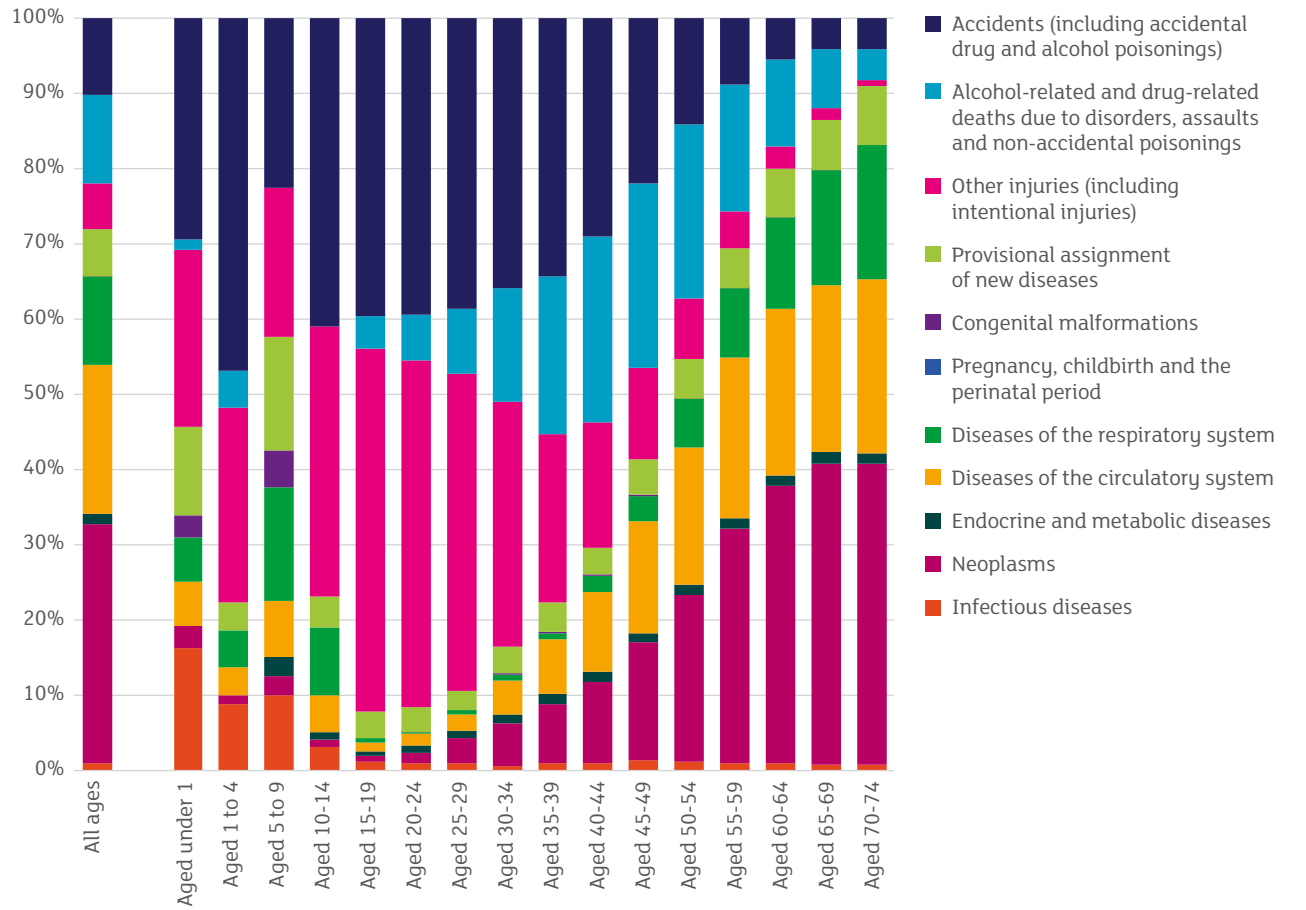
Overall trends: accidents are the leading preventable cause of death among children and young adults

In the UK, accidents are a major cause of death for people at all lifestages, but they are especially significant causes of death in some age groups. For instance, in UK adults aged 20 to 39, they are the second most common cause of death (after intentional injuries) – and they are the most common cause in the 35–39 age bracket. Accidents are also the fourth-most-common cause of death in children aged 1 to 9 (after cancer, birth defects and diseases of the brain and nerves; accidents are an even more common cause of death among those aged 1 to 4), and the second-most-common cause in young people aged 10 to 19 (after intentional injuries). [36]

Although the number of accidental deaths is highest among older people, accidental deaths make up a relatively small proportion of all deaths in this age group, reflecting high numbers of deaths from cancer, heart and lung diseases, and 'mental disorders' (the official classification group name, which includes neurodegenerative diseases such as dementia).[37]

Figure 38: Causes of death by age group, UK, 2022

Source: Appendix 1, Table 12. Note: Excludes 1,706 neonatal deaths in England and 80 neonatal deaths in Wales, to which the ONS intentionally do not assign an ICD-10 code for their underlying cause of death



However, from a policy perspective, we need to understand how many of these deaths would have been *preventable*: deaths which could have been avoided with public health interventions. They don't need to happen. The World Health Organisation have published a list of causes which are agreed to be 'preventable'; this list has been adopted by the ONS. Accidents are always considered preventable, alongside intentional injuries and a range of diseases (see Appendix 1, Table 8.3 for a list). We find that accidents are one of the leading causes of preventable death, as Figure 39 shows.

Analysis by RoSPA shows that accidents are the **leading cause of preventable deaths in the under-40s** in England and Wales, accounting for over 2,400 preventable deaths in this cohort in 2022, and over 8,000 preventable deaths across all ages up to 75.[38] As Figure 39 shows, the proportion of preventable deaths that are due to accidents is high among babies and children (and highest among 1 to 4 year olds) and remains high among younger and middle-aged adults.

Figure 39: Preventable deaths by age group and underlying cause, England and Wales, 2022

Source: Appendix 1, Table 8.1 Note: the ONS excludes deaths in the over 75s from its definition of preventable deaths

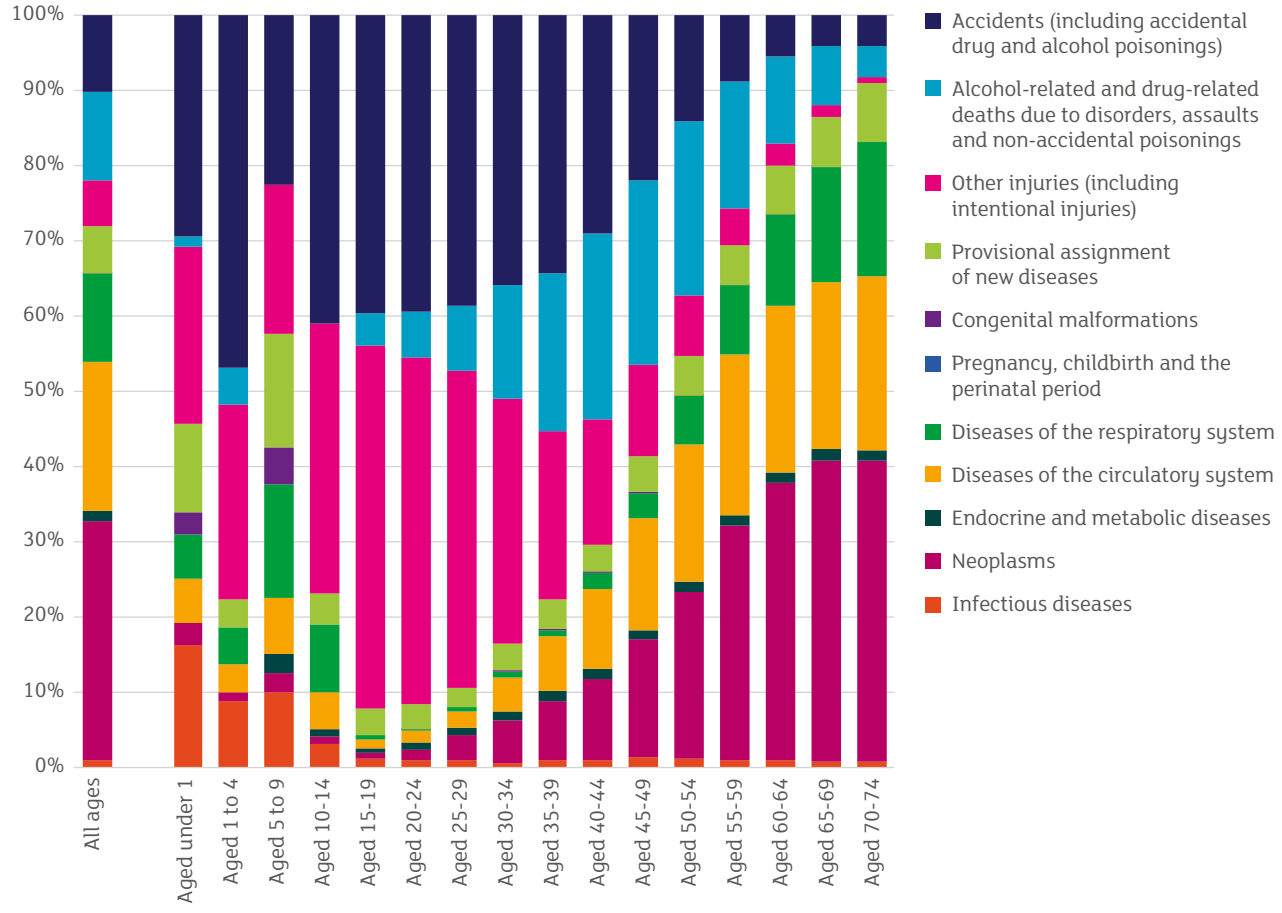
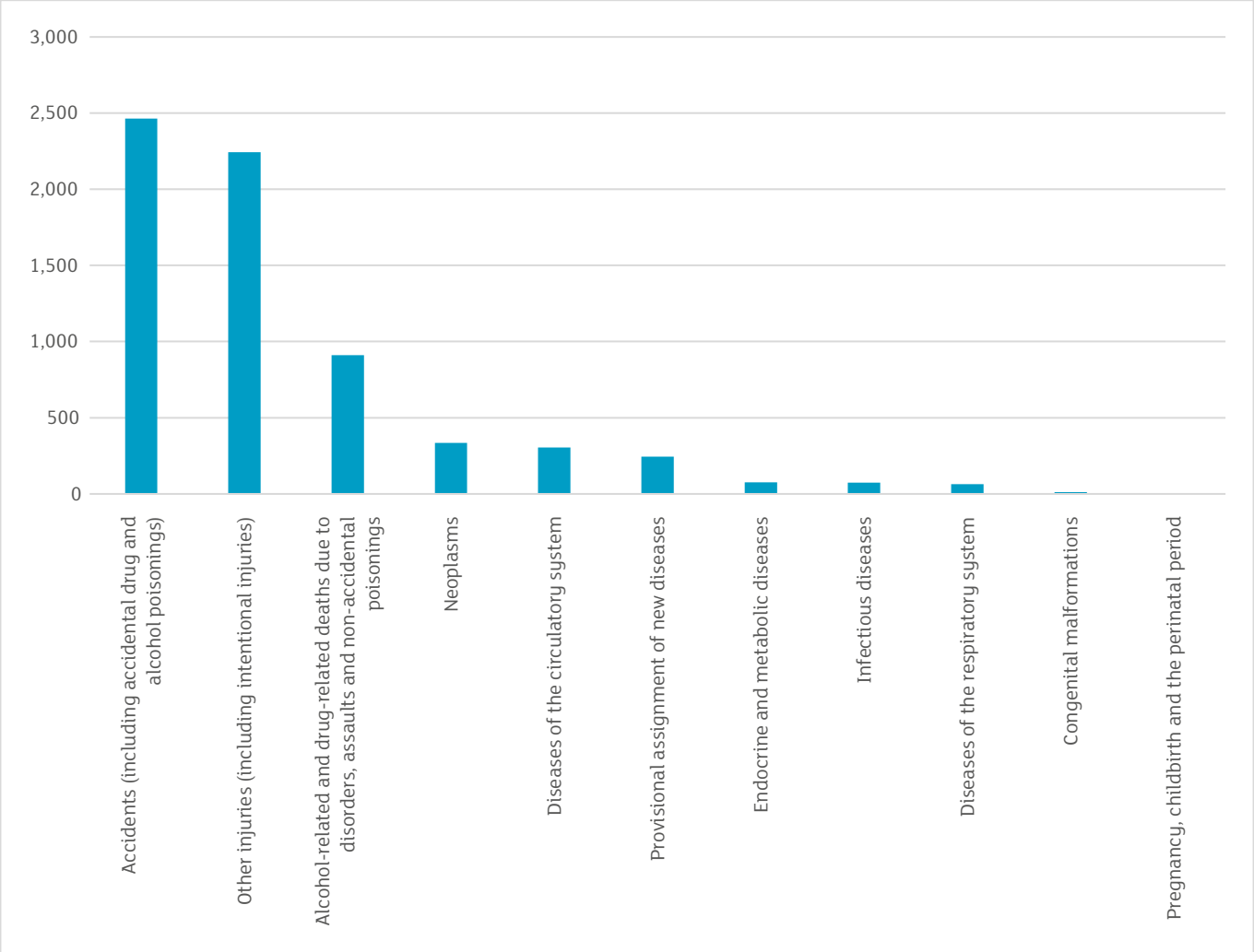


Figure 40: Causes of preventable death in the under 40s, England and Wales, 2022

Source: Appendix 1, Table 8.2



These figures underscore how preventable accidents needlessly take thousands of lives and are major causes of death in younger people, children and babies. They also demonstrate how the rate of accidental death is not uniformly distributed across age groups.

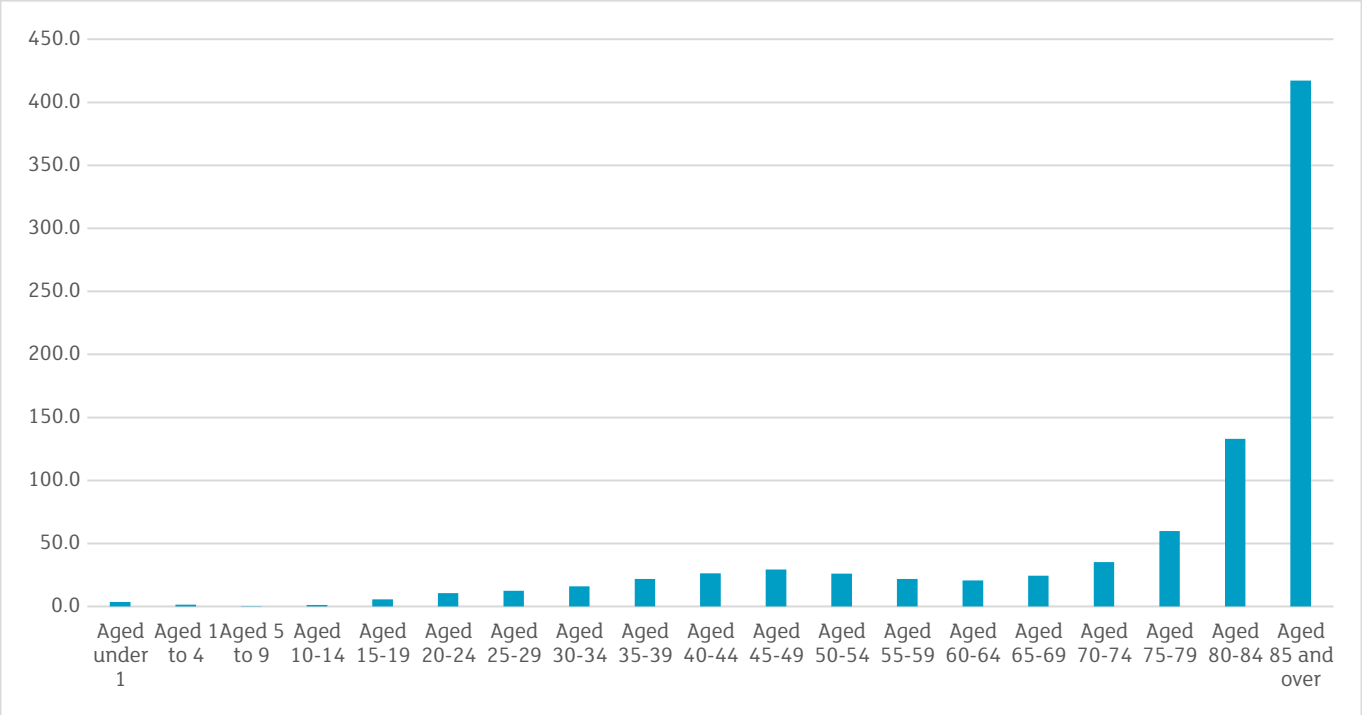
Accident numbers across age groups

Accident numbers and rates vary widely by age. The number of people dying due to accidents generally rises with age, though there is a small peak in middle age, followed by a modest decline in numbers, and then a sharp increase after the age of 65. 60% of people who died due to an accident in the UK in 2022 were aged 65 or older. The rate of accidental deaths among the over-65s is about 1 per 1,000 people, which is over 6 times higher than the rate among under-65s. The rate of accidental deaths among older people increases exponentially with age, reaching over 1 in 150 in the over 90s.[39]

The picture is more complicated among people aged under 65. In the first year of life, children are at elevated risk of accidental death, though the rate remains very low. The rate then drops, reaching its lowest level in older children before climbing again from the teenage years onwards, peaking among those in their mid-40s, before falling back until the rate once again rises amongst people in their late 60s and then grows sharply with age. The shape of this curve is visible in the graph below (Figure 41).[40]

Figure 41: Age-specific accidental death rate per 100,000 people, UK, 2022

Source: Appendix 1, Table 7.6.



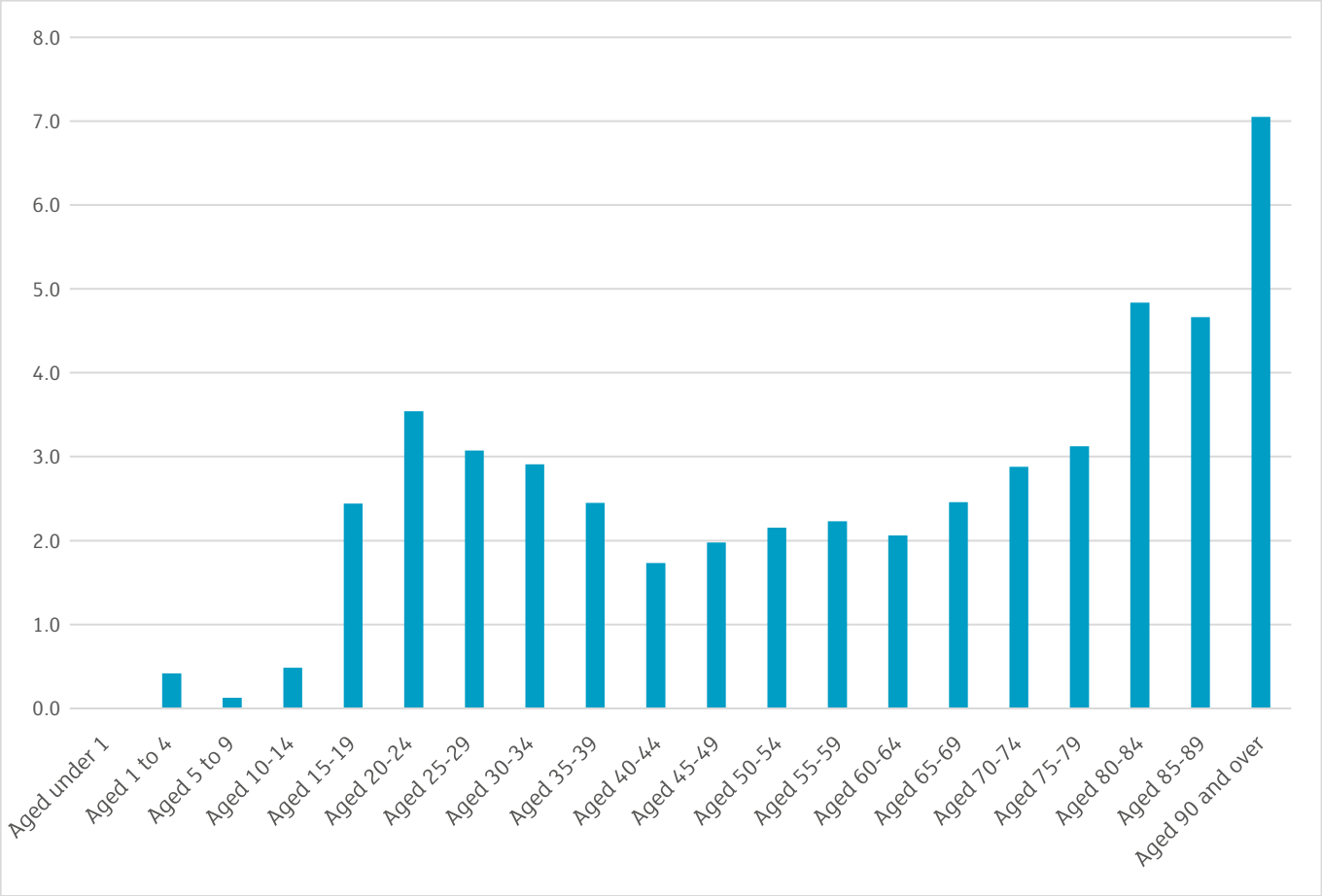
Accident types across age groups

Behind these trends, there are substantial differences in the type of fatal accidents that occur in different age groups. As Figures 43 and 44 below show, falls account for most of the fatal accidents among older people; indeed, over 65s are less likely than younger cohorts to suffer from a number of causes of accidental deaths, including poisonings and transport accidents, but their propensity to suffer fatal falls makes them far more likely to die of accidents than any other cohort. In Chapters 3 and 6, we discuss falls and measures that can be taken to reduce them.

Falls play a much smaller role in accidental deaths among young people, but accidental death numbers do rise among older teenagers and younger adults before reaching a middle-aged peak. The initial rise in accidental deaths among older teenagers can be accounted for partly by the sharp rise in transport accidents in that cohort, which carries on rising into the early 20s then falls back progressively with age. Young drivers are particularly at risk of involvement in road accidents, as outlined in Chapter 5. These unique factors have led RoSPA to call for Graduated Driver Licences for under 25s (see Chapter 5). Older drivers (those over 70) account for small numbers of fatal crashes, but are actually more likely to be at fault during a road accident and are more likely to be involved in a crash,[41] with age-specific fatality rates rising progressively in cohorts older than 60, as illustrated in Figure 42 below. This can be due to underlying health conditions, medication, visual impairment and difficulties judging the speed of other vehicles or spotting hazards. RoSPA provides courses and advice for older drivers, while the charity Independent Age advises older drivers to speak to their GP, have their eyesight and hearing tested, keep active and change driving habits (for instance, to reduce travelling and cut down journeys at busy times).[42] It is important that any accident prevention strategy in transport recognises the different risk profiles, needs and characteristics of these cohorts.

Figure 42: Age-specific rate of death due to transport accidents, per 100,000, UK, 2022

Source: Adapted from Appendix 1, Tables 7.1 and 7.2



Fatal accidental poisonings are another type of age-specific accident which are implicated in the rise in accident numbers seen in younger and middle-aged adults. They are rare in young children, though there are risks from ingesting toxic chemicals, including in everyday items like liquid laundry pods as well as medications.[43] However, poisonings rise sharply from the late teenage years, peaking among those aged in their late 40s and accounting for many of the accidental deaths among adults under 65. In 2022, almost half of the fatal accidental poisonings in the UK were caused by narcotics or hallucinogenic drugs, and 1 in 10 were related to alcohol, with substance abuse often beginning in young adulthood. Poisonings then become far less frequent with age in the over 65s.[44]

If these types of accidents help to explain the shape of the curve among adults, fatal accidents among babies and children also have distinct profiles and change with age. In their first year of life, babies die more from threats to breathing – choking, suffocation or, less commonly, drowning – than any other type of accident, as Figure 44 shows. Choking, suffocation and drowning also account for many accidental deaths among older children and younger teenagers.[45] Many of these accidents can occur in the home and from common scenarios or items: RoSPA has sought to raise awareness around the risk of blind cords and nappy sacks for young children,[46] while the Child Accident Prevention Trust has highlighted the dangers of grapes, button batteries and choking on food.[47] As choking can often be silent, it can go unnoticed if parents are not with their children. Some of these problems can be mitigated by design – blind cords, for instance, can be clipped into place; other risks can be reduced through parental education, standards, labelling, safe storage, and other interventions.

Drowning and choking both remain important causes of accidental death into adulthood (chokings becoming more prevalent again from middle age), though they are proportionally far less significant than poisonings, falls and transport accidents among adults, highlighting the need for an age-based focus. It is possible that choking deaths in adulthood will have different causes and profiles, especially amongst older people where they may be linked to other health conditions.

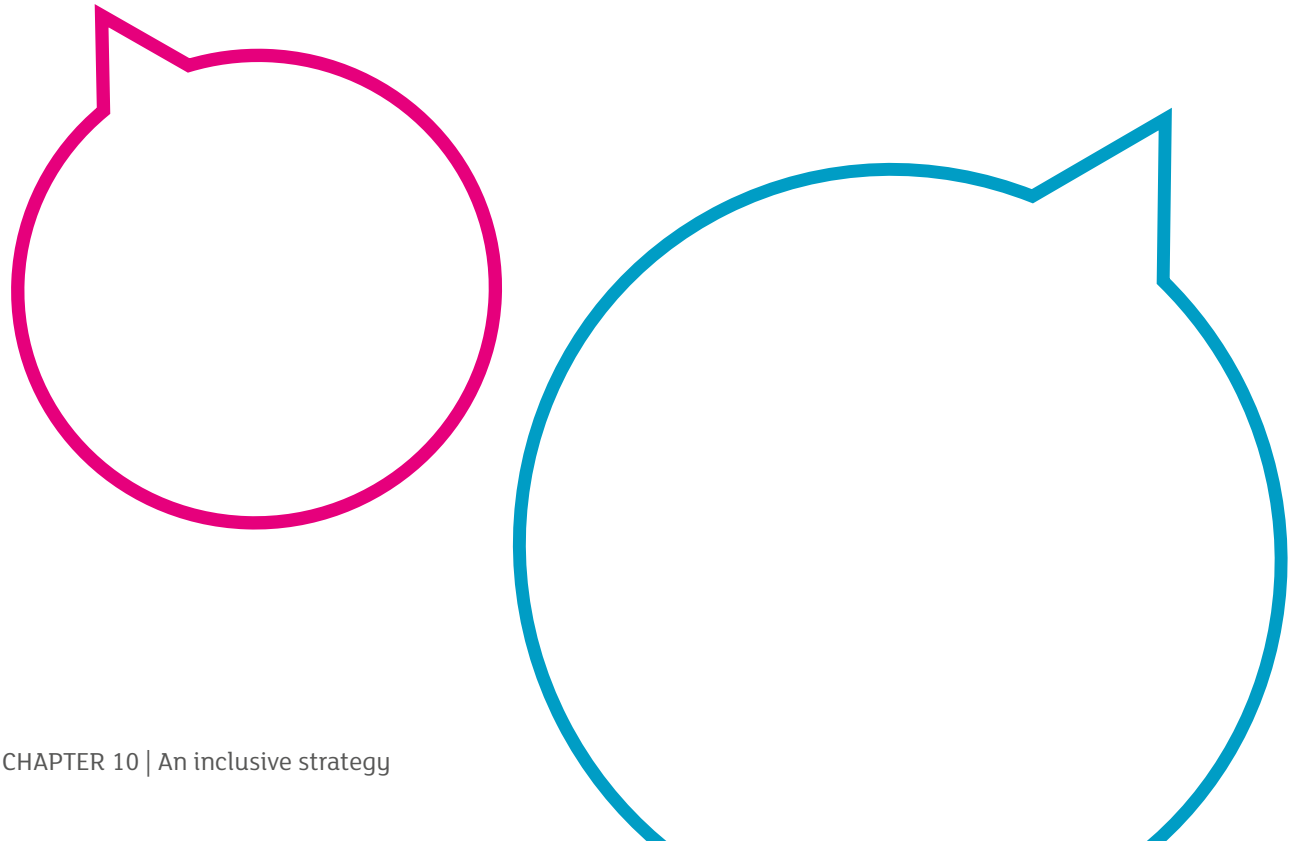


Figure 43: Accident deaths by age group, by type of accident, UK, 2022

Source: Appendix 1, Table 7.1.

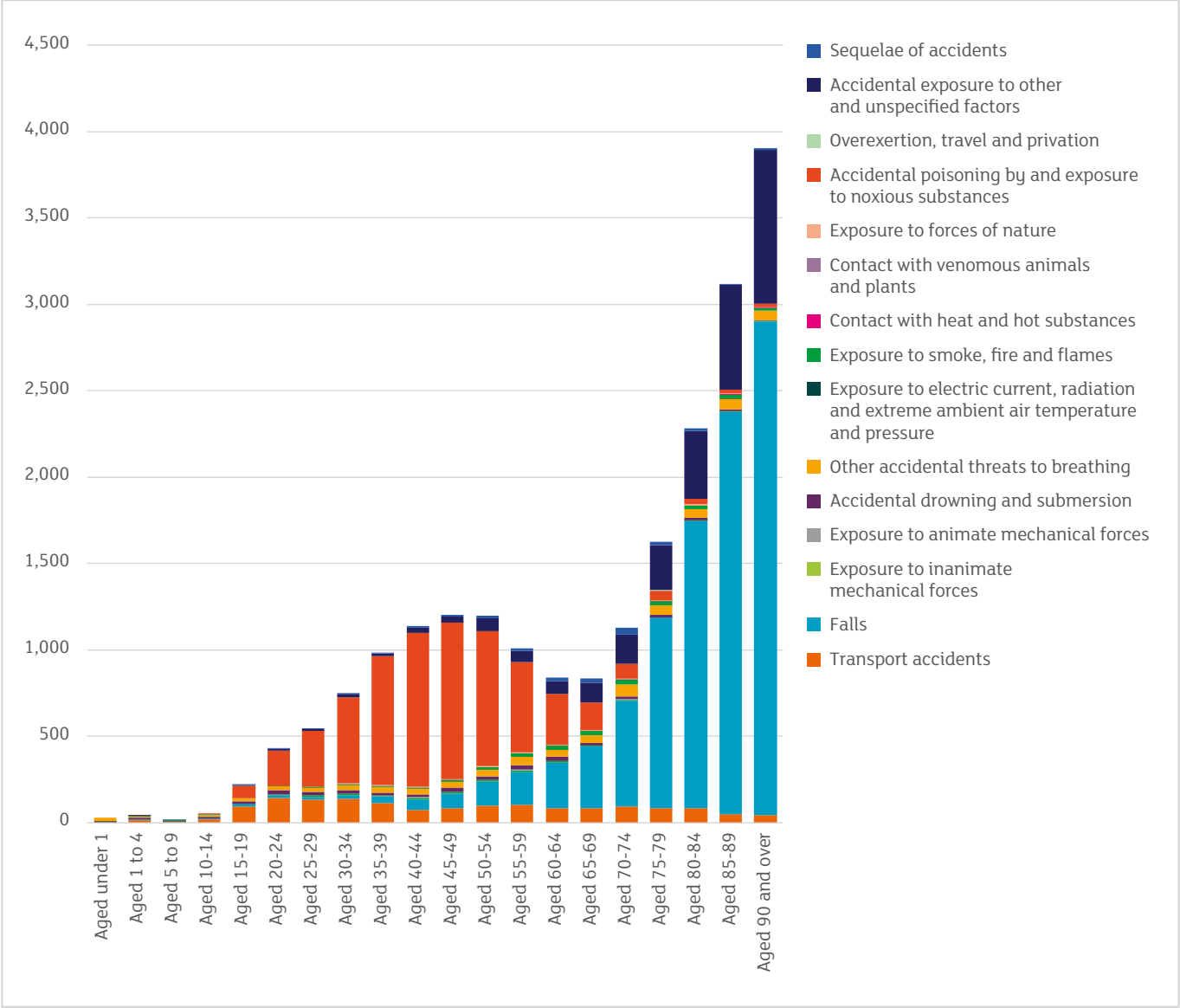
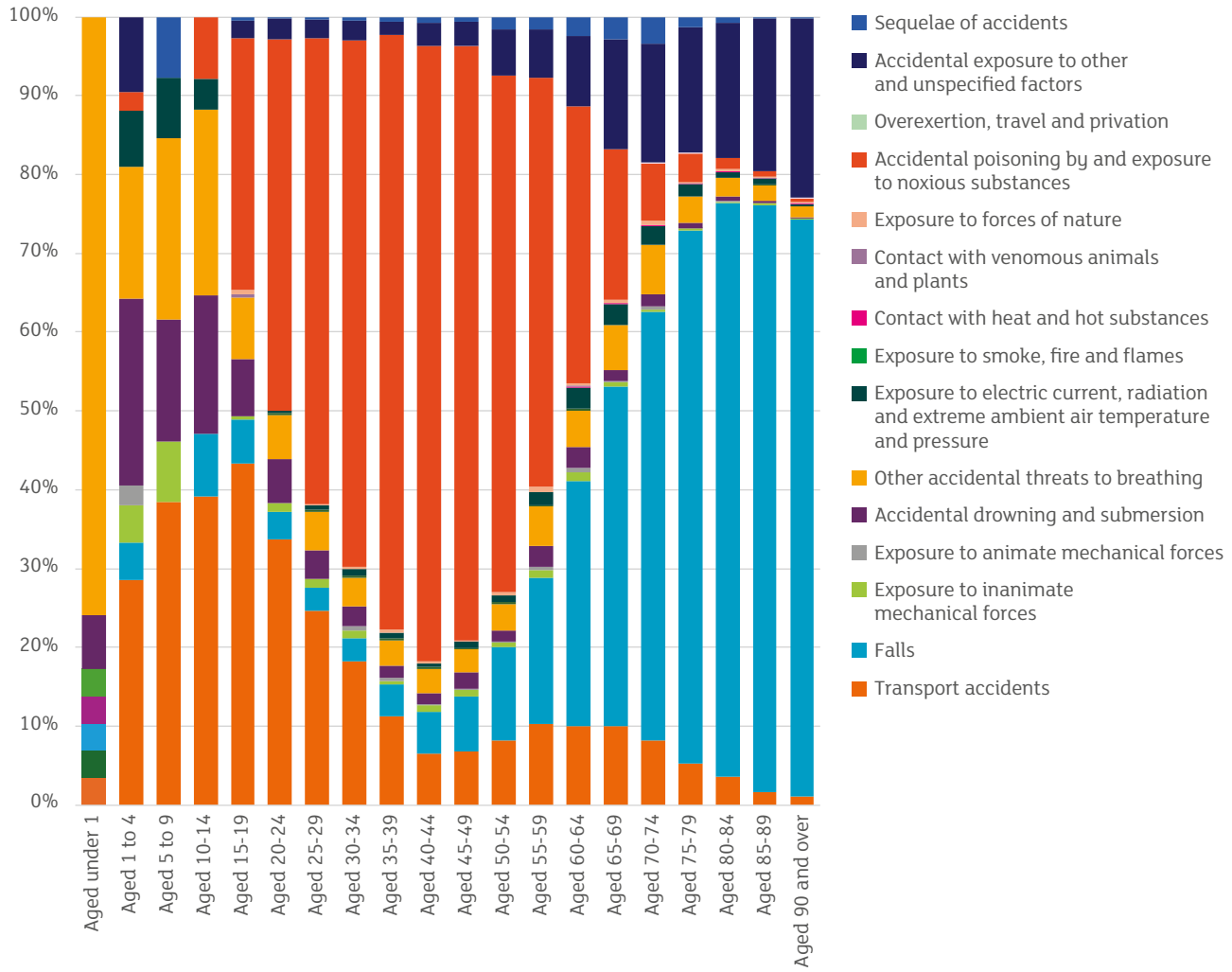


Figure 44: Causes of accidental death by age group, by type of accident, UK, 2022 (showing % of accident types leading to accidental death for each age cohort)

Source: Appendix 1, Table 7.1



Accident prevention measures therefore must account for disparities in accident rates and types between age cohorts. Reducing falls, for example, will require addressing the very high rate of fatal falls in the over 65s.

Age and severity of accidents

It is important to understand that certain types of accident are more lethal than others, though even where accidents rarely lead to death, they can cause serious injury and require lengthy hospital admission. Age plays a role in this too. Hospital admissions data from England highlights how transport accidents account for a relatively small proportion of children admitted to hospital, but a high proportion of accidental deaths in children. The same is also true for drownings and chokings, which are a leading cause of accidental death in children but make up a small proportion of childhood hospital admissions. By contrast, falls and contacts with objects (the latter known as 'exposure to inanimate forces') make up a large proportion of accident-related childhood admissions but account for relatively few accidental deaths in those cohorts, even though they can be serious.[48]

Whereas poisonings are a leading cause of accidental deaths in working-age adults (accounting for the vast majority of accidental deaths in those in their 40s), they make up only a small proportion of hospital admissions among adults – and are about as common among children as they are working-age adults. This

points to important differences in poisoning types and severity between children and adults, with drug overdoses and alcohol poisonings probably dominating poisonings among adults and being more likely to lead to death.[49]

Falls again make up a large proportion of hospital admissions for working-age adults and the rate rises with age, though falls are not often fatal in this age bracket, unlike falls in the over 65s which are associated with more severe injury and higher fatality rates.[50] In the elderly, falls can be very serious; over 100,000 people aged 65+ suffer from hip fractures annually, mostly due to injuries sustained in falls. As Age UK have reported, women account for two-thirds of those suffering from hip fractures – which links to the discussion above (in the section on gender) around reduced bone density in post-menopausal women. Unsurprisingly, 36% of older people are reported being worried about having a fall.[51] Working-age adults' relatively better core strength, underlying health, bone density and steadiness on their feet are likely responsible for the fewer admissions and far fewer fatalities in their cohort.

The rate of accidents involving objects is also high for children, teenagers and adults under 60 (accounting for around 1 in 5 admissions), though these are also rarely fatal; these accidents can involve being struck by objects in many settings, but especially work, sports and doing DIY activities, which likely explains why over-65s are progressively less likely to be admitted for these injuries as they age. Overexertion and privation are also rarely fatal, but still account for over 5% of hospital admissions in people in their 20s and 30s.[52]

Figure 45: Causes of accident-related hospital admissions by age group, England, 2022/3 (share of admissions per age group)

Source: Appendix 2, Table 3.1

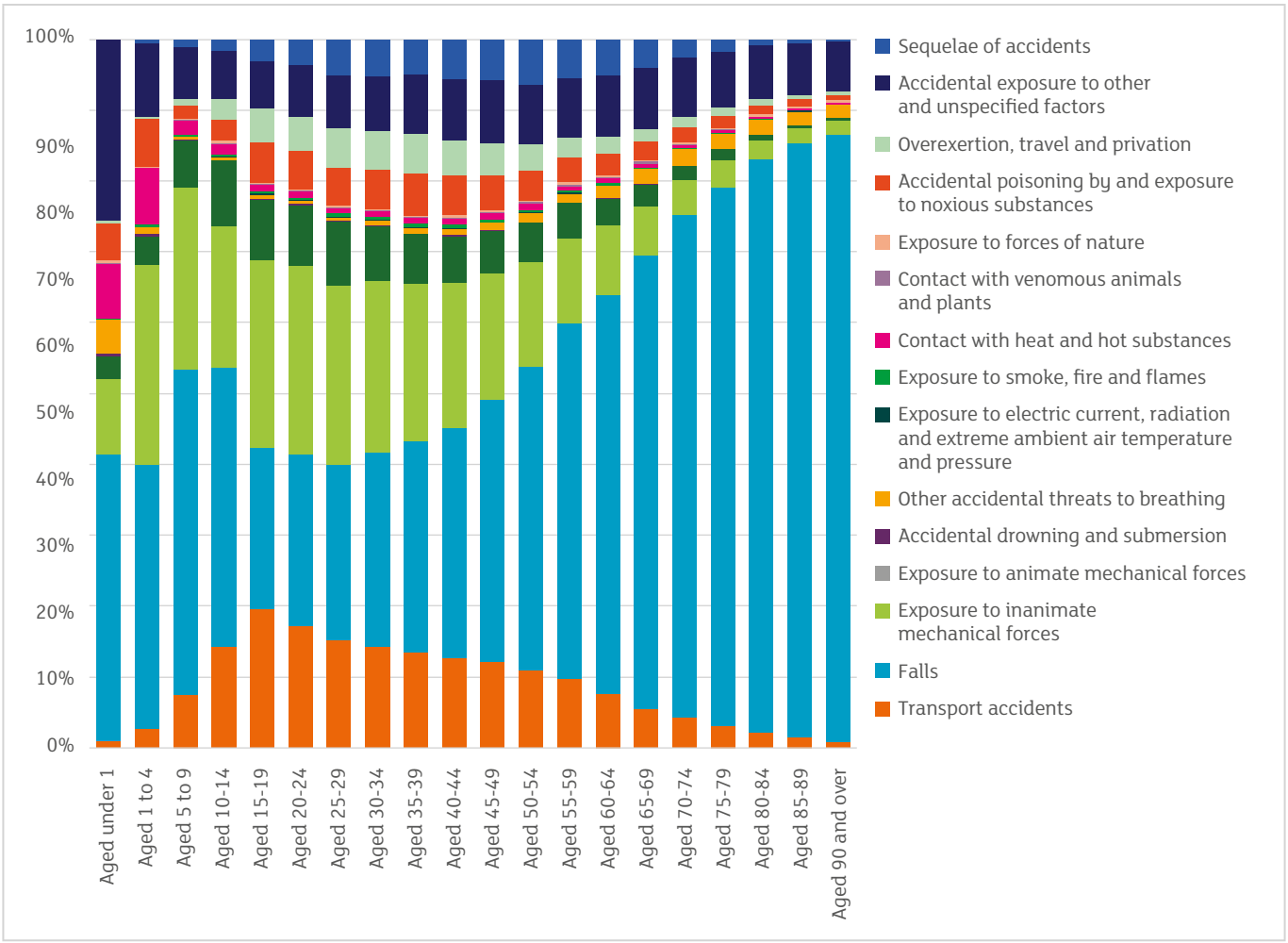
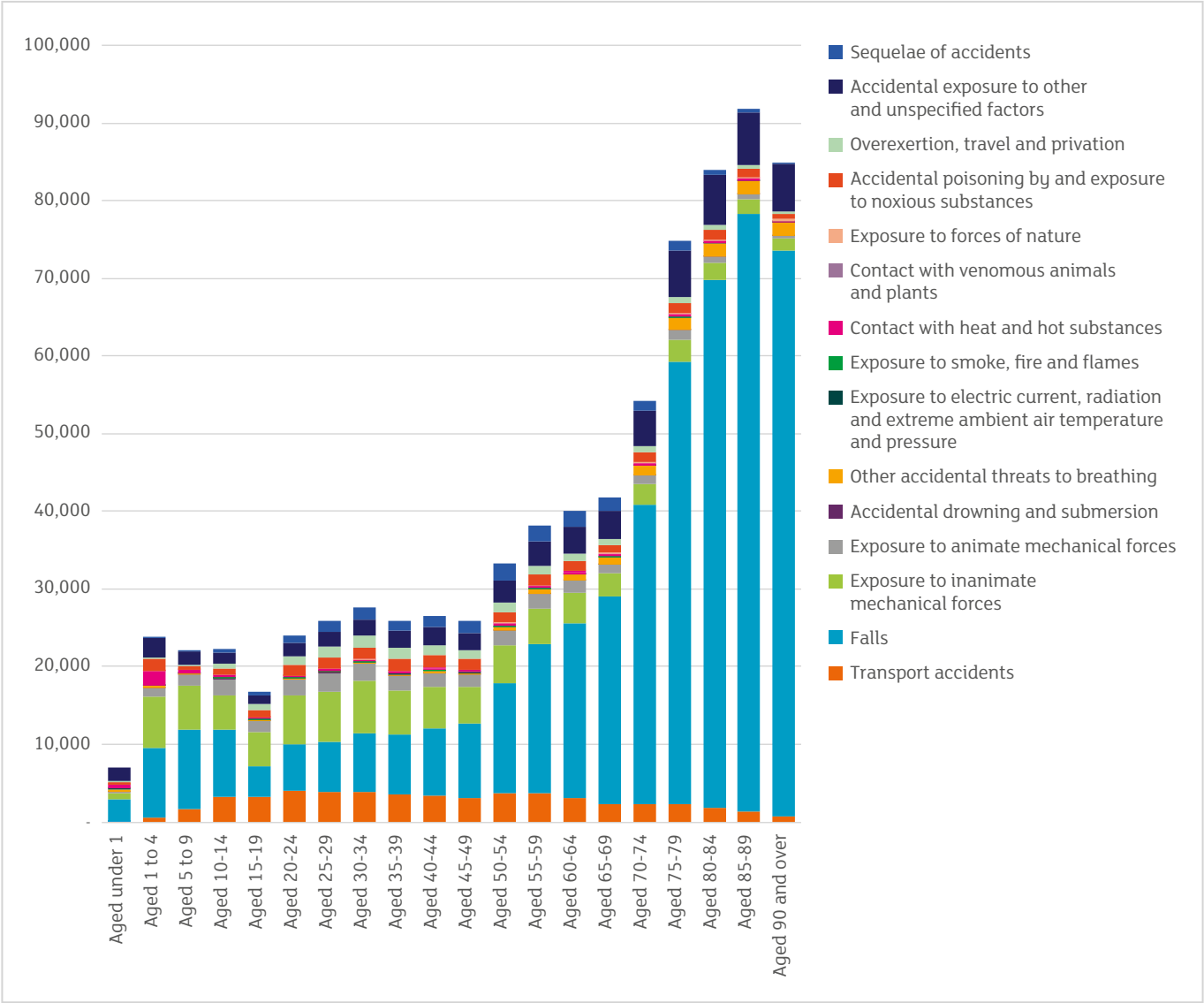


Figure 46: Accident-related hospital admissions by age group, England, 2022/3 (number of admissions)

Source: Appendix 2, Table 3.1.

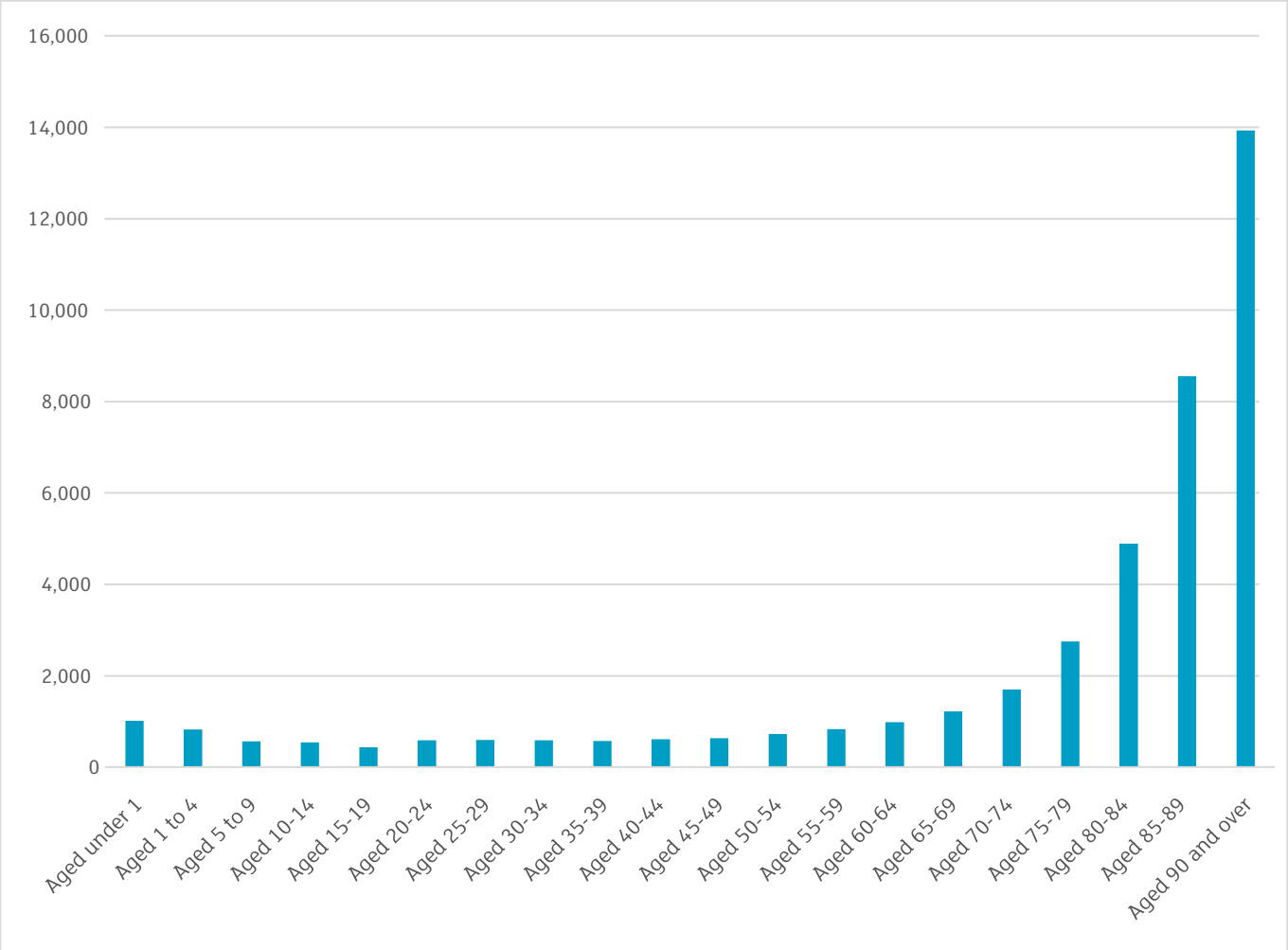


The number of hospital admissions due to accidents generally rises with age, but it is a different shaped graph to the number of accidental deaths, because the middle-aged bulge is not evident as the small number of accident poisonings leading to admissions is out of step with the high number of deaths from poisonings in this age group. The number of accident-related admissions among children is also at a similar rate to admissions among working-age people, whereas far fewer children die due to accidents than working-age adults.[53]

However, when we look at the rate of accident-related admissions in each age group, we can see that the rate is slightly higher among very young children (1 in 100 for under 1s), then drops and stays relatively static (at around 1 in 200) for adults until the 60+ cohorts, when the rate climbs quickly, peaking at 1 in 7 admissions among the over 90s.[54]

Figure 47: Age-specific rate of hospital admissions per 100,000 people, England, 2022/3

Source: Appendix 2, Table 3.3.



These findings suggest that we must pay attention not only to age, but also to severity and type of accident. Targeting reductions in hospital admissions, for instance, may require different interventions than targeting reductions in accidental fatalities. Reducing both is imperative, as serious but non-fatal accidents can still have long recovery times, lead to permanent disability and can be costly for patients, their families, businesses and the NHS. But reducing both fatalities and serious but non-fatal accidents will require paying close attention to the roles of age and lifestage in contributing to differential accident rates and severity.

Health and disability

There is strong evidence that accident rates are higher among people with chronic health conditions and disabilities, though there is limited official data in the UK. The World Health Organization (WHO) found that 'people with disabilities are at a higher risk of nonfatal unintentional injury from road traffic crashes, burns, falls, and accidents related to assisted devices'.[55]

Specific types of disability and illness can produce different risk levels for certain accident types. A study in Finland found that the number of chronic illnesses a person has is correlated with their risk of falling.[56] Public Health England (PHE) advises that 'adults with learning disabilities experience a higher rate of injuries and falls compared to the general population. People with learning disabilities who live in community or residential settings may fall more frequently, and at a younger age, compared to the general population'.[57] PHE notes that epilepsy, visual impairment, prescription medications, balance issues and limited mobility are also particular risk factors for people with learning disabilities. Some people with learning disabilities also suffer from sight problems, further compounding the risk of accidental injury.[58]

The risk of transport injuries can be higher among disabled people compared with other people. In the UK, disabled pedestrians were over 4 times more likely to be injured in vehicle collisions than non-disabled people. This was a greater odds ratio than that for low-income people, men, older people or people living in London. The risk of a disabled pedestrian suffering a fall was 2 times higher than for non-disabled people.[59] This trend is supported by multiple studies from Canada, US, Europe and Australia, which show that disabled pedestrians are at increased risk of injury in road traffic incidents.[60]

Children with disabilities or health problems are also at elevated risk of accidental injury. According to WHO, studies show that children with disabilities have a 'significantly higher risk of falls, burn-related injuries, and injuries from crashes involving motor vehicles or bicycles'.[61] Children with developmental disabilities such as autism and ADHD are 2 to 3 times more at risk of an injury, according to another study.[62] Data from the US Centre for Injury Research and Policy showed that children with disabilities are 50% more likely to have a non-fatal injury than children without; the risk is even higher for children with visual impairments, ADHD and asthma. In the US, children with disabilities are 5 times more likely to be hit by a car when walking or cycling.[63]

Finally, it is worth noting that mental ill health can contribute to an individual's increased risk of accidental injury. Poor mental health can impair judgement and lead to people taking risks, especially when under stress, making accidents more likely. This risk has often been emphasised in relation to workplace injuries,[64] and there is also evidence that poor mental health can also be implicated in elevated risks of burns and transport accidents and a rise in general accident rates, though the degree of added risk appears to depend partly on the type of mental disorder a person has.[65]

Nation, region and the countryside

The city and the countryside have differential rates of some accidents. This is especially true of road accidents, because rural roads are far more dangerous than urban ones for every type of road user.

Almost 1,000 people are killed annually on rural roads in Great Britain, compared with 627 on urban roads. However, the number of slight and serious injuries on urban roads was higher, suggesting that road collisions happen more frequently in urban areas but are more often fatal in the countryside. This is often because rural roads have blind bends and lack pavements and road surfaces are in poorer condition. Visibility at night can be limited due to the lack of street lighting. People travel faster on country roads, partly due to reduced

volume of traffic and partly because more roads have higher speed limits.[66] However, this is also related to behaviour. A survey by Brake found that 68% of drivers consider it acceptable to drive above the speed limit on rural roads.[67]

This means that every road user is at greater risk of being killed or seriously injured on rural roads:

- 10 times as many people die on rural roads than on motorways in Great Britain.[68]
- 57% of all serious injuries to car users in Great Britain occurred on rural roads.[69]
- Per mile travelled, cyclists are far more likely to be injured on rural roads than urban ones: in 2019, 73% of cycling miles were travelled on urban roads, but only 40% of cyclist fatalities occurred on them.[70]
- Over two thirds of motorcyclist fatalities occur on rural roads, with the most common causes being failure to negotiate bends, collisions at junctions or while overtaking, and the rider losing control.[71]
- Pedestrians are more often injured in urban areas, but serious injuries frequently occur in rural areas, especially as rural roads can be narrow and lack pavements; per mile travelled, vehicles on minor roads cause more pedestrian injuries than vehicles on major roads.[72]

The presence of animals on the road can pose a unique hazard in rural areas. Horse riders often have to travel on roads to access bridlepaths, but horses are large, powerful animals which can panic easily even when very well trained – and can be startled by fast moving or loud vehicles. The British Horse Society received reports of 3,383 road incidents involving horses in 2023, 85% of the time because vehicles passed too closely or too quickly. They found that 3 riders were killed on the roads that year, and on average a horse was killed every week on the roads (66 over the year).[73] RoSPA's analysis of English hospital admissions data shows that in 2022/3, 2,560 animal riders or occupants of an animal-drawn vehicle were admitted to hospital following a collision – we expect the vast majority of these to involve horses. Across the UK, 106 animal riders or animal-drawn vehicle occupants have been killed in transport accidents over the decade to 2022.[74]

Although the rural roads do have these higher rates of accident and unique hazards, in some specific scenarios, risks can be higher in urban areas. In cities, pedestrians are twice as likely to be involved in a collision with an electric or hybrid electric car, reflecting their increasing popularity in urban areas.[75] It seems likely that e-scooters and e-bikes will be used more frequently in urban areas and this could impact accident rates for this type of vehicle.

Off the road, there has been limited research on differences in accident rates between rural and urban areas. In the countryside, agriculture accounts now for only a small amount of employment even in very rural areas, but it is one of the most dangerous occupations in terms of workplace injuries and fatalities. Quarrying, forestry and fishing are other rural industries with high accident rates. Some rural recreational activities, such as rambling, off-road cycling, horse-riding and climbing, will carry risks and appropriate precautions do need to be taken by participants, but these risks need to be contextualised against the health benefits these activities can bring when carried out safely, including through developing core strength and muscle mass, which have a positive effect on accident recovery (see Chapter 8).

There are also variations in accidental injury and fatality rates between and within the constituent nations of the UK, its regions and local authorities. These are discussed in Chapters 11 and 12.

Intersecting and overlapping inequalities

All of these factors can interact in complex ways to increase the risk of accidental injury in certain groups. For instance, while all older people are at higher risk of falls and so are many people with certain serious health conditions, based on the evidence outlined earlier we might expect older women with chronic health conditions to be even more at risk from serious injury caused by falls than either of those groups alone. Likewise, we have seen that ethnic minority people from disadvantaged backgrounds tend to have even higher rates of some accidents than white people from deprived areas, all else being the same. Male motorcycle riders in rural areas are at particularly high risk of serious injury on the roads. The list could go on; the point is that multiple factors can compound the risk of an accident occurring.

More work needs to be undertaken to track these effects across a wider range of accident types, because this will be important in making targeted, effective policy interventions, which can reduce the highest accident rates the fastest and reduce health inequalities.

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[1] Public Health Scotland, 'Unintentional Injuries', 11 October 2022.

[2] J. A. Silversides, et al., 'Social Deprivation and Childhood Injuries in North and West Belfast', *Ulster Medical Journal*, vol. 74, no. 1 (2005), pp. 22-28.

[3] Phil Edwards, et al, 'Deaths from Injury in Children and Employment Status in Family: Analysis of Trends in Class Specific Death Rates', *British Medical Journal*, vol. 333, no. 7559 (2006), p. 119.

[4] Transport for London, Inequalities in Road Dangers in London (2017-21), 2nd ed. (London, 2023), p. 3.

[5] 'Deprivation', Understanding Glasgow: The Glasgow Indicators Project (retrieved 23 May 2024).

[6] Silversides et al. (2005).

[7] The Health Foundation, 'Quantifying Health Inequalities', 15 August 2022.

[8] The King's Fund, 'Health Inequalities in a Nutshell', 9 February 2024.

[9] National Child Mortality Database, 'Child Death Review Data Release: Year ending 31 March 2023', (figure 8).

[10] Appendix 1, Tables 6.1 and 6.2.

[11] Appendix 2, Table 5.

[12] Women's Budget Group, *Public Transport and Gender: Briefing from the UK Women's Budget Group on Transport and Gender* (London, 2019), p. 1.

[13] Scottish Government, 'Motorcycle Usage by Gender: FOI Release', 23 November 2023.

[14] Rachel Aldred, et al., 'How Does Mode of Travel Affect Risks Posed to Other Road Users? An Analysis of English Road Fatality Data, Incorporating Gender and Road Type', *Injury Prevention*, vol. 27 (2021), pp. 71-76.

[15] Michael Goodier, 'Male Drivers Three Times More Likely to Be in Road Collisions with Pedestrians', *The Guardian*, 9 October 2022.

[16] Quoted in RAC, 'New Report Reveals That Male Drivers are Three Times More Likely to Be in Road Collisions with Pedestrians', 10 October 2022.

[17] Appendix 1, Tables 6.1 and 6.2.

[18] Ian Peate, 'Why Are More Men Dying of Drug Poisoning?', *Independent Nursing*, 13 September 2019:

[19] Appendix 2, Table 5.
[20] Appendix 1, Tables 6.1 and 6.2, and ibid.
[21] *Ibid.*
[22] J. A. Stevens and E. D. Sogolow, 'Gender Differences for Non-Fatal Unintentional Fall Related Injuries among Older Adults', *Injury Prevention*, vol. 11, no. 2 (2005), pp. 115-119.
[23] NHS, 'Falls', 25 June 2021.
[24] Health and Safety Executive, 'Gender' (retrieved 22 May 2024).
[25] Health and Safety Executive, 'Work-Related Fatal Injuries in Great Britain', (retrieved 22 May 2024).
[26] Chartered Institute of Building, 'UK Crying Out for Female Tradespeople Says Research by the Chartered Institute of Building' (retrieved 22 May 2024).
[27] Health and Safety Executive, 'Gender' (retrieved 22 May 2024).
[28] National Association for Women in Construction Yorkshire Region, *Women's PPE in the Construction Industry* (Hull, 2023), pp. 7-8. We are grateful to Katy Robinson for her work in this area.
[29] Searching the HSE improvement notice database for breaches of the Personal Protective Equipment at Work Regulations yielded 71 results, of which 20 related to ill-fitting PPE (none specifically mentioned women).
[30] R. Steinbach, P. Edwards, J. Green, and C. Grundy, *Road Safety of London's Black and Asian Minority Ethnic Groups: A Report to the London Road Safety Unit* (London, 2007).
[31] Agilysis and Living Streets, *Road Traffic and Injury Risk in Ethnic Minority Populations* (Banbury, 2021), p. 6.
[32] *Ibid.*
[33] Steinbach Rebecca, Green Judith, Edwards Phil, and Grundy Chris, '"Race" or Place? Explaining Ethnic Variations in Childhood Pedestrian Injury Rates in London', *Health & Place*, vol. 16 (2010), pp. 34–42.
[34] *Ibid.*
[35] See 'Ethnicity', NHS England Digital (retrieved 29 May 2024). For completeness and consistency of this data, see Suhail I. Shiekh et al., 'Completeness, Agreement, and Representativeness of Ethnicity Recording in the United Kingdom's Clinical Practice Research Datalink (CPRD) and Linked Hospital Episode Statistics (HES)', *Population Health Metrics*, vol. 21 (2023).
[36] Appendix 1, Table 12.
[37] *Ibid.*
[38] To arrive at these figures, we combined cause of death data from the ONS for each of the causes listed by the ONS as preventable (adjusting the figures as the ONS recommends). However, our analysis diverges from the ONS groupings of causes in two ways: (1) we have separated accidents from intentional injuries and injuries of undetermined intent (they were previously grouped as 'injuries' in the ONS definition); and (2) we have incorporated accidental drug and alcohol poisonings into the accident category for consistency with the ICD-10 accidents grouping we use elsewhere in this report (the ONS separates these deaths from other accidents and places them in a broader category of drug and alcohol deaths). For more detail and final tables, see Appendix 1, Table 8.1.
[39] Appendix 1, Table 7.1 and 7.6.
[40] Appendix 1, Table 7.6.
[41] RoSPA, *Older Drivers Policy Paper* (Edgbaston, 2021), p. 1.
[42] Independent Age, *Behind the Wheel: Tips for Safe and Confident Driving in Later Life* (London, 2017).
[43] RoSPA, 'Liquid Laundry Capsules' (retrieved 29 May 2024).
[44] Appendix 1, Table 7.1; for type of poisoning, we analysed ONS, NRS and NISRA cause of death data, looking at the 3-digit ICD codes in the range X40–X49. See also, Chapter 3.
[45] Appendix 1, Table 7.1.
[46] RoSPA, 'Nappy Sacks' (retrieved 29 May 2024); RoSPA, 'Blind Cord Safety' (retrieved 29 May 2024).
[47] For instance, Child Accident Prevention Trust, 'Concerns Grow about Children Choking on Food' (retrieved 29 May 2024),
[48] Data from Appendix 1, Table 7.1 and Appendix 2, Table 3.1.
[49] *Ibid.*

[50] *Ibid.*

[51] Age UK, 'Falls in Later Life: A Huge Concern for Older People', 24 May 2019.

[52] Data from Appendix 1, Table 7.1 and Appendix 2, Table 3.1.

[53] Appendix 2, Table 3.1.

[54] Appendix 2, Table 3.3.

[55] WHO, *World Report on Disability* (Geneva, 2011), p. 60.

[56] Milla Immonen, et al., 'Association between Chronic Diseases and Falls among a Sample of Older People in Finland', *BMC Geriatrics*, vol. 20 (2020).

[57] PHE, *Health Inequalities: Falls and Fractures, Accidents and Injuries* (London, 2019), p. 1.

[58] *Ibid.*

[59] Rachel Aldred, *Road Injuries in the National Travel Survey: Under-Reporting and Inequalities in Injury Risk* (London, 2018), p. 18. Note: an odds ratio is the ratio of (a) and (b), where (a) is the odds of an event taking place in the presence of something (X), and (b) is the odds of the same event taking place in the absence of X. It indicates the strength of association between an event and X.

[60] Naomi Schwartz et al., 'Disability and Pedestrian Road Traffic Injury: A Scoping Review', *Health & Place*, vol. 77 (2022).

[61] WHO, *World Report on Disability* (Geneva, 2011), p. 60.

[62] L.-C. Lee, et al., 'Increased Risk of Injury in Children with Developmental Disabilities', *Research in Developmental Disabilities*, vol. 29 (2008), pp. 247-255.

[63] Tom Shakespeare, 'Disability: An Accident Waiting to Happen?', *BBC*, 11 May 2009.

[64] See, for instance, 'Workers with Poor Mental Health Take More Risks and Are More Likely to Be Injured at Work, Stats Reveal', *IOSH Magazine*, 30 November 2023; International Labour Organisation, 'Mental Health at Work' (retrieved 4 October 2024).

[65] Angus S. McDonald and Graham C. L. Davey, 'Psychiatric Disorders and Accidental Injury', *Clinical Psychology Review*, vol. 16, no. 2 (1996), pp. 105-127.

[66] RoSPA, *Rural Road Safety* (Edgbaston, 2021).

[67] Brake, 'Rural Roads' (retrieved 29 May 2024).

[68] Brake, 'Rural Roads' (retrieved 29 May 2024).

[69] RoSPA, *Rural Road Safety* (Edgbaston, 2021).

[70] *Ibid.*

[71] *Ibid.*

[72] *Ibid.*

[73] The British Horse Society, 'Horses and Equestrians Still Being Killed at Alarming Rate on UK Roads' (retrieved 29 May 2024).

[74] ONS, NRS and NISRA, cause of death data, deaths (UK) coded with underlying cause as ICD code V80. NHS England Digital, 'Admitted Patient Care Activity: External Causes, 2022-23': Hospital admissions for England coded with secondary diagnosis of ICD code V80.

[75] London School of Hygiene and Tropical Medicine, 'Pedestrians "Twice as Likely" to Be Hit by an Electric or Hybrid-Electric Car', 22 May 2024.

CHAPTER 11

A four-nations approach

A four-nations approach

Many areas of policymaking have been devolved to Scotland, Wales and Northern Ireland since the late 1990s, meaning that we now have had 25 years of possible divergence in many areas of accident prevention. We certainly have no qualms with each nation having more power to deal with its own problems as it sees fit – indeed, we encourage empowerment at national, regional and local level. But we do need to understand that there is much that can be learnt by working across these boundaries too, including sharing data and expertise.

A national strategy needs to recognise that each nation has both similarities and differences in its accident rates; in some cases, it is only by taking a four-nations approach that these different rates can be recognised, allowing targeted interventions to be developed.

The purpose of this chapter is to present an overview of accident rates in England, Scotland, Wales and Northern Ireland, highlighting overall trends and also areas where nations diverge from each other. We make recommendations around improved data collection and reporting too.

Figure 48: Accidental deaths by nation, 2013 to 2022 (stacked chart)

Source: Appendix 1, Table 1.

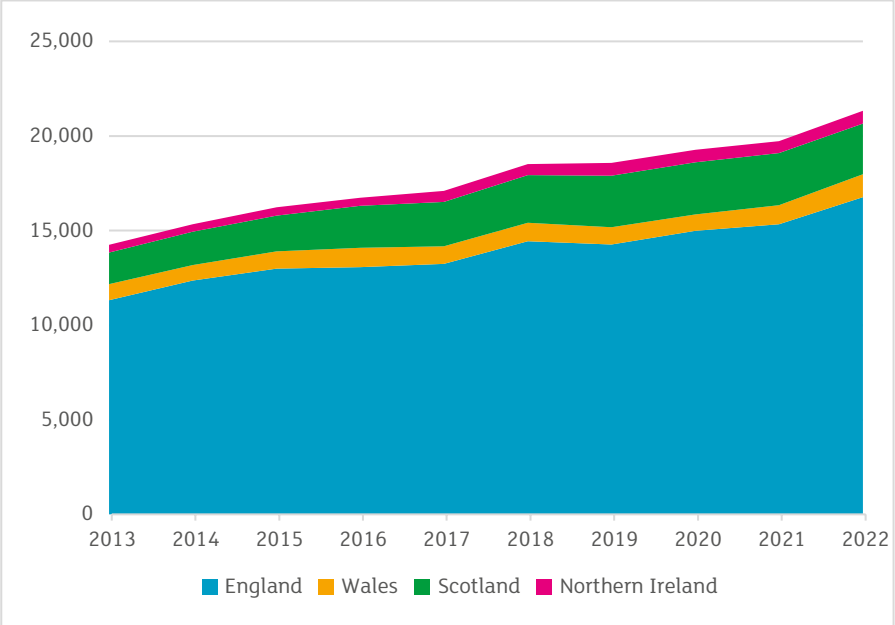


Figure 49 to 52: Annual accidental deaths in England, Wales, Scotland and Northern Ireland, 2013 to 2022

Source: Appendix 1, Table 1.

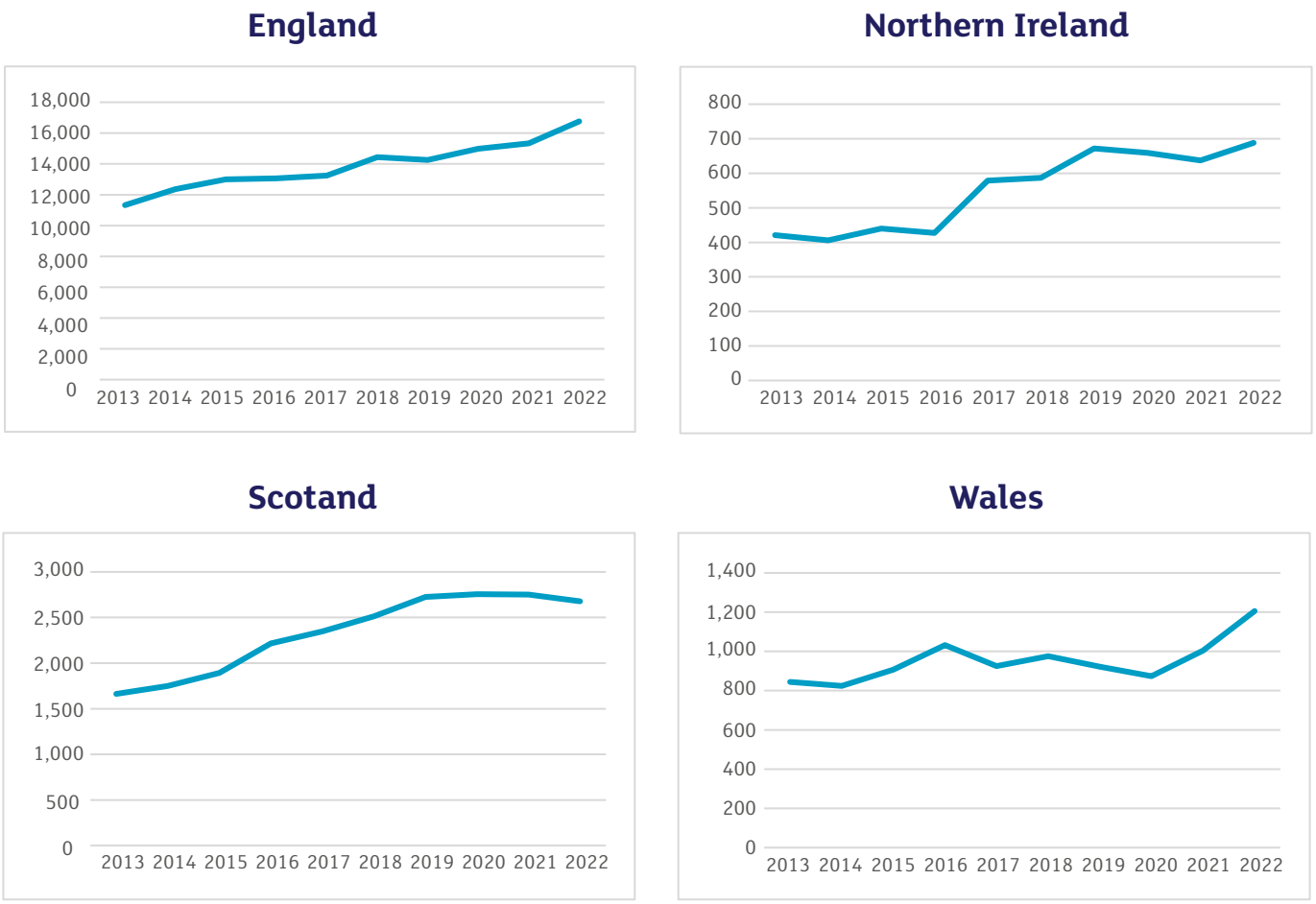
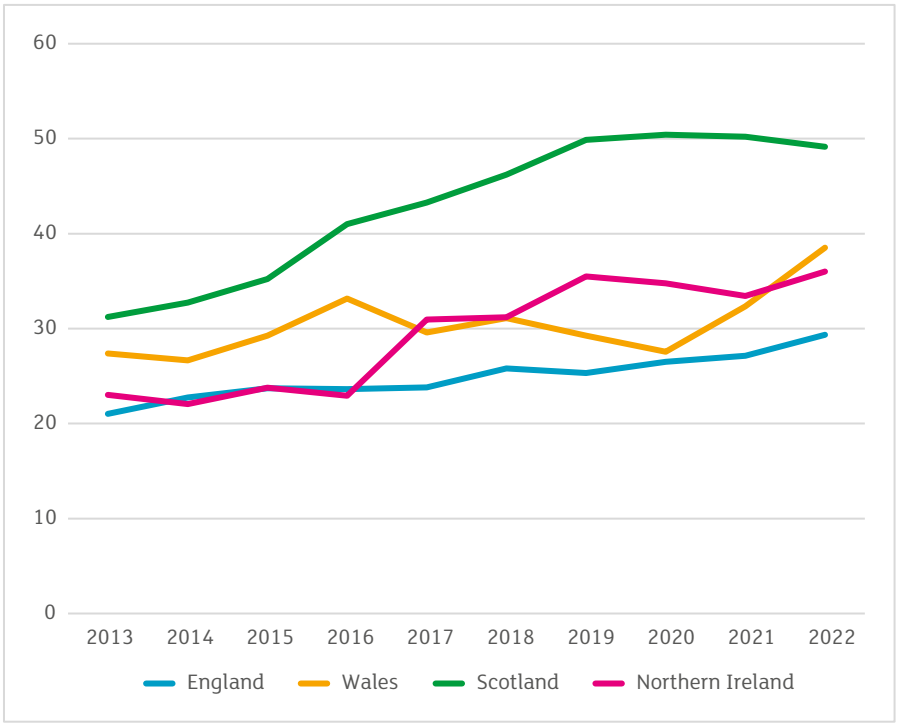


Figure 53: Accident rates per 100,000 people, by nation, 2013 to 2022

Source: Appendix 1, Tables 10.2–10.5.



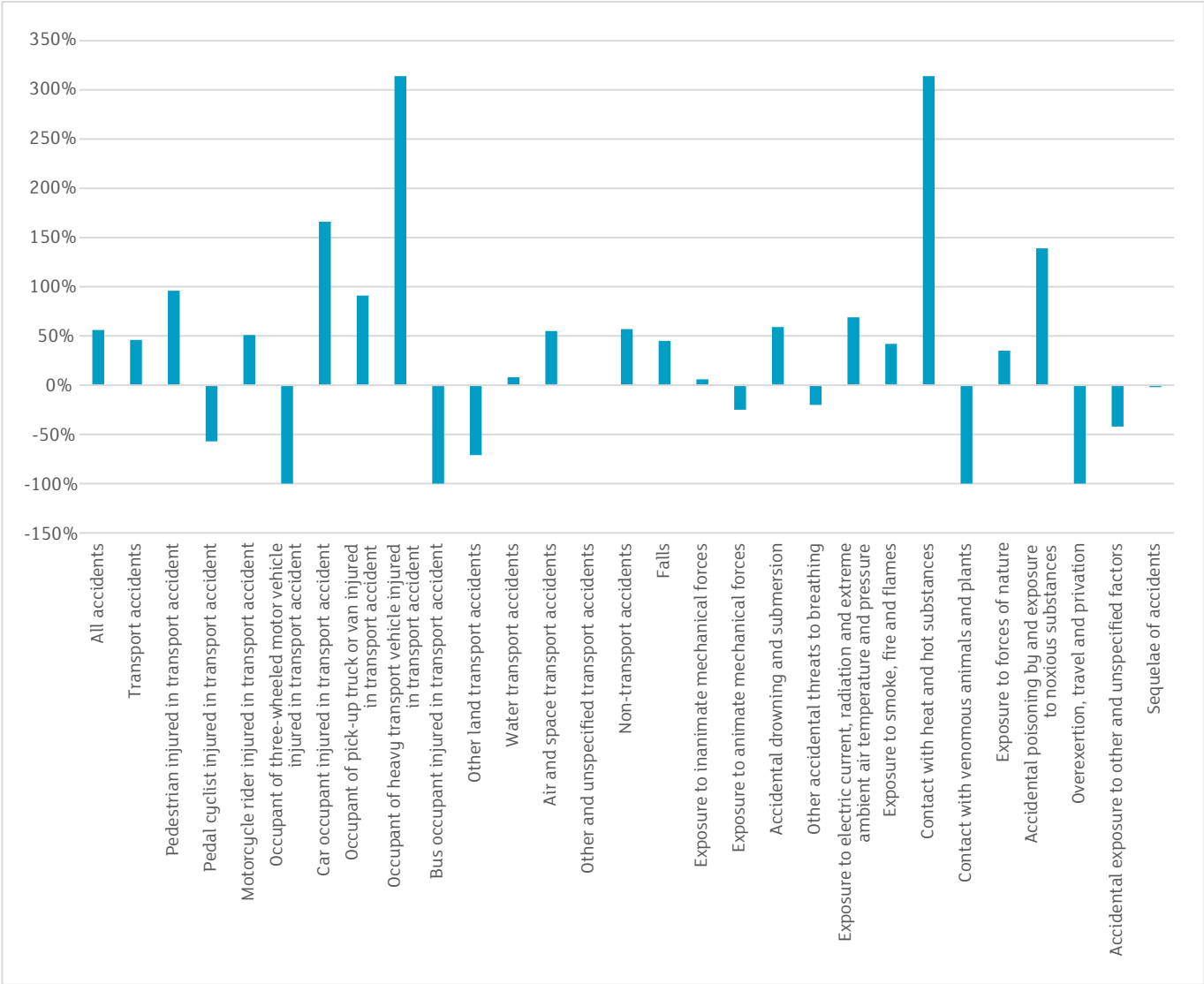
Accident rates per capita vary widely across the four nations. Scotland has the highest per capita rate of accidental deaths in the UK; at 49 accidental deaths per 100,000 people, the rate in Scotland is 56% higher than the UK's rate and 67% higher than the rate in England. Wales and Northern Ireland also have higher rates of accidental deaths, though the difference is smaller: for Wales, it's 31% higher than England, while it's 23% higher for Northern Ireland. England's accidental death rate (at 29 per 100,000 people) is lower than any of the other nations and 7% lower than the rate across the whole of the UK.[1]

Scotland

For Scotland, this disparity holds across almost every type of accident. As Figure 54 shows, the per capita rate of transport-related accidental deaths is 46% higher than the UK figure. This is driven largely by the rate of car occupants being killed in accidents being 166% higher than the UK rate and over double the English rate. The rate of pedestrian deaths is 96% higher than in the UK, while motorcyclists are over 50% more likely to be killed in an accident while riding in Scotland than in the rest of the country. However, the rate of pedal cyclists killed in accidents is lower (-57%).[2] Rates are also much higher for occupants of less common vehicle types, like heavy vehicles and air transport.

Figure 54: Difference in per capita accidental death rates in Scotland compared with the UK, 2022

Source: Appendix 1, Table 10.6



There is no settled explanation for these disparities between nations; studies rarely highlight them and officials tend to avoid trying to explain them. However, Scotland's poor record for pedestrian deaths and its higher rate of car fatalities were well known at least as far back as the mid-1990s,[3] indicating that this is a longstanding issue and one which needs a more strategic approach if the situation is to be improved. As Chapter 10 highlighted, rural roads are typically more dangerous than urban ones and it seems plausible that Scotland's more rural roads and more rugged landscape could contribute to higher accident rates, possibly in combination with its wetter and colder climate which could lead to more slippery roads and reduced visibility.

The design of the roads may also contribute to accident rates. For instance, the A9 is one of the most important roads in northern Scotland, but is mostly single carriageway north of Perth, which combines with poor weather, winding passages, long journey times and heavy seasonal use by tourists to make it particularly accident-prone. 13 people died on the A9 in 2022, almost ten percent of all non-pedestrian transport fatalities in Scotland. Earlier studies found that overtaking has been implicated in over 40% of fatalities on the road.[4] Several other key routes in northern Scotland (A82 and A90) include significant single-carriageway sections.

However, it is not clear if or how these factors could adequately explain such drastically higher rates of pedestrian deaths. More needs to be done to understand what determines these higher rates.

While accidental deaths on the roads tend to be higher in Scotland than in other parts of the UK, the rate of non-fatal injuries of all severities tend to be lower than England and Wales. For car users, the rate of non-fatal accidental injuries was lower in Scotland than in England and Wales (-53% across all severities in 2021) and the disparity was particularly high for less severe injuries. Similar trends have been observed among child car users, all pedestrians and pedal cyclists.[5]

Scotland's non-transport fatal accident rate is also far higher than the UK's (+57%) and England's (+69%). The disparity is especially pronounced in the rate of accidental poisonings (+139% compared to the UK; +175% compared to England), accidental drownings (+59% compared to the UK and +72% compared to England), exposure to smoke, fire or flames (+42% against the UK and +52% against England), and falls (+45% compared to the UK, +55% compared to the UK). Several other infrequent causes also record higher rates, but the number of fatal accidents in these categories is very low.[6]

Scotland's elevated drowning death rate is well known and has been the subject of intervention by the Scottish Government for several years, including Water Safety Scotland's Drowning Prevention Strategy for 2018 to 2026.[7] The higher drowning rate is partly caused by Scotland's population having such good access to inland water (including its many lochs and rivers), which creates opportunities for drowning; this is compounded by water temperature typically being lower in Scotland, making the risk of cold water shock higher. Men are at particularly high risk of drowning in Scotland, indicating that they may be more likely to take risks in cold water.[8]

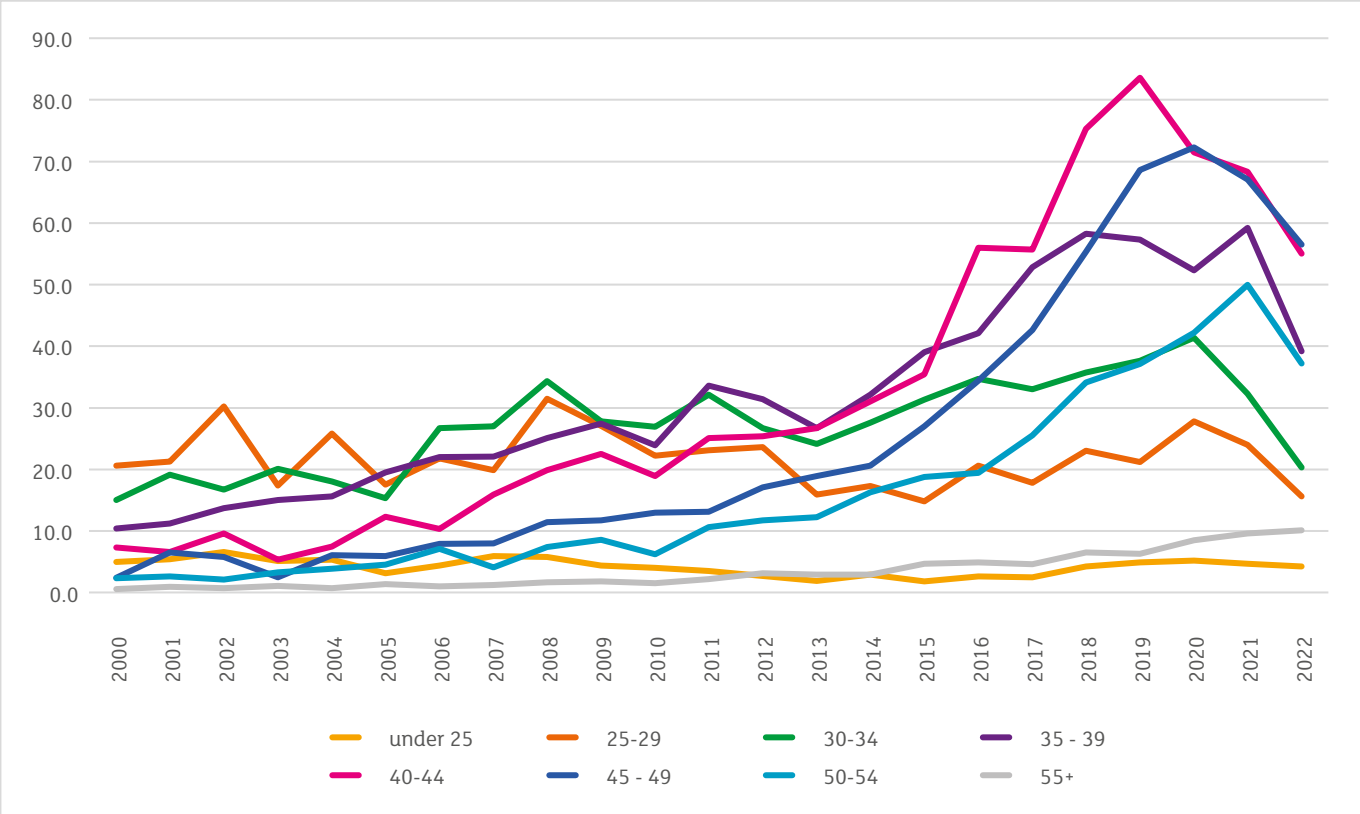
The rate of fire-related deaths in Scotland reflects the higher rate of dwelling fires in Scotland, which has been falling for several years but remains much higher than in England and Wales.[9] The causes of this are not well understood, and the numbers are low so will fluctuate annually.

By contrast, falls account for 42% of all accidental deaths in Scotland (1,139 in 2022), so the fact that they occur over 50% more frequently is a very significant disparity.[10] The reasons for this are also poorly understood and could relate again to more rugged terrain and wetter conditions, and potentially to more people living in flats or apartments – though these are merely speculative suggestions.

The rate of accidental poisonings is far less surprising, given Scotland's 'drug abuse crisis' which has seen a sharp spike in drug-related deaths since the early 2010s; the country has one of the highest rates of drug deaths in the developed world, prompting the Scottish Government to issue a new four-year National Mission on Drug Deaths in 2022.[11] Given that the rate of drug deaths has only increased among those born from the mid 1970s to the early 1980s, it is thought that the recent rise in deaths reflects the increase in drug use in deprived communities following deindustrialisation in the 1980s and 1990s, possibly compounded by cuts to drug and alcohol prevention services in the mid-2010s.[12] The rate of deaths from drug-misuse have begun falling in recent years but still remain very high.

Figure 55: Rates of drug misuse deaths per 100,000 people, Scotland, by age, 2000 to 2022

Source: National Records of Scotland, 'Drug-Misuse Deaths in Scotland, 2022', 22 August 2023 (figure 3 and table 5).



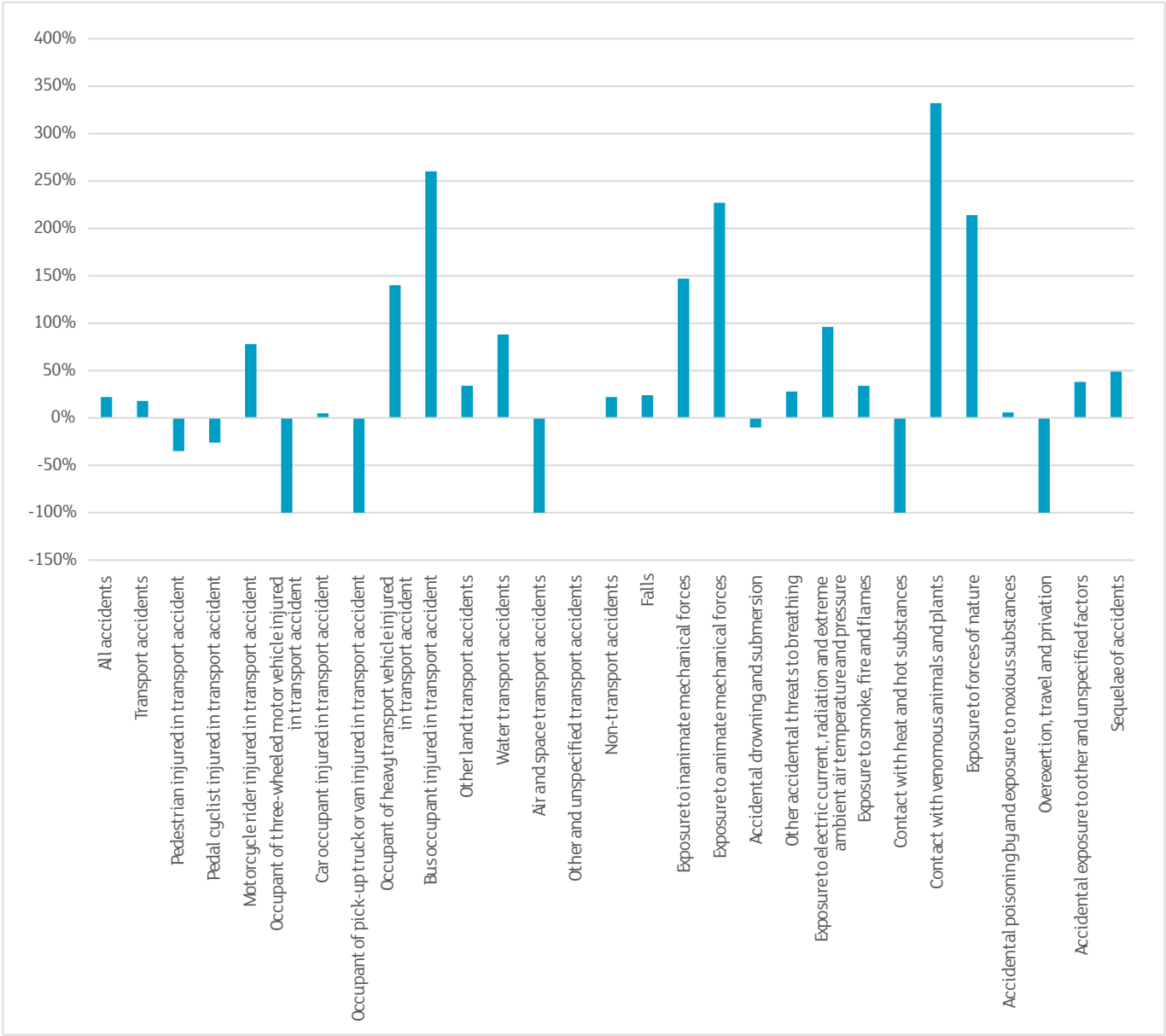
Wales

Wales also has higher rates of accidental death than the whole of the UK, at +22% (the rate is +31% compared to England); this is about half of the level of the difference per capita found in Scotland. The rate of transport deaths is higher in Wales, but at +18% the disparity is much lower than in Scotland and Northern Ireland. The rates of most types of transport accident are lower than in the UK including for pedestrians (-35%) and pedal cyclists (-26%), though motorcycle rider death rates are 78% higher than in the UK and those in water transport are 34% higher and the rate of 'other land transport accidents' is 88% higher. Car occupant deaths were 5% higher per capita.[13]

Like Scotland, it is possible that Wales's high number of rural roads, more rugged landscape and windier, wetter climate contribute to higher road accident rates, especially among motorcyclists. More work needs to be done to test these hypotheses and look to reduce accident rates.

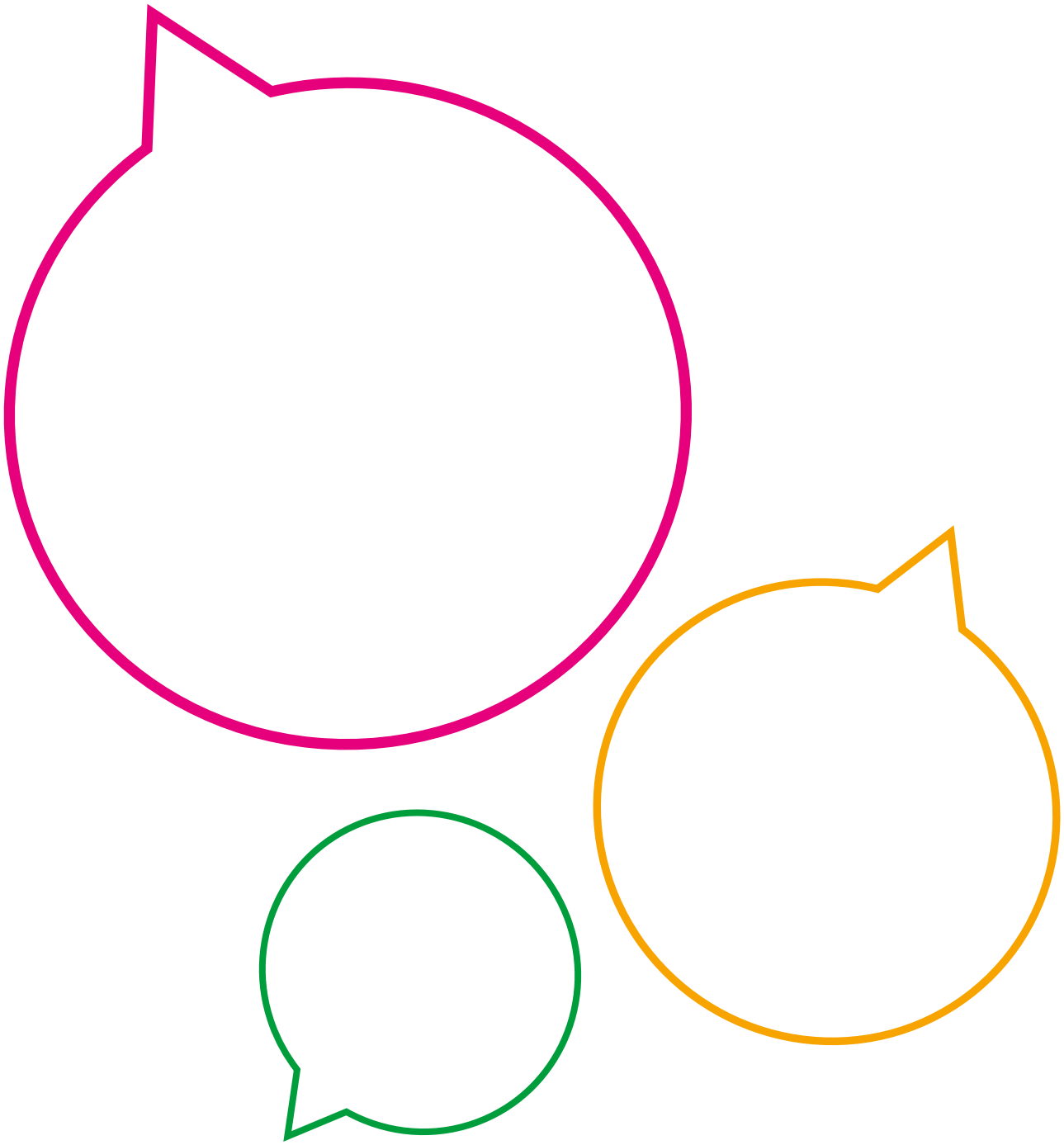
Figure 56: Difference in per capita accidental death rates in Wales compared with the UK, 2022

Source: Appendix 1, Table 10.6



The rate of non-transport accidental deaths in Wales was 22% higher than in the UK as a whole in 2022. This was mostly because the rate of fall-related deaths was 24% higher and this makes up the largest cause of accidental death. The rates of accidental deaths caused by exposure to both inanimate and animate forces were especially elevated at +147% and +227% (the former referring to impacts with other objects, the latter referring to injuries caused by living things). Deaths caused by exposure to forces of nature were over 200% higher in Wales than in the UK, and those caused by exposure to smoke/fire or electric current were also elevated but to a lesser degree. While the rate of suffocation and choking deaths was elevated, the rate of drownings was 10% lower than in the UK.[14]

As with Scotland, the causes of these differences are not well understood; much more needs to be done to uncover why these rates are so markedly higher in Wales than in England.



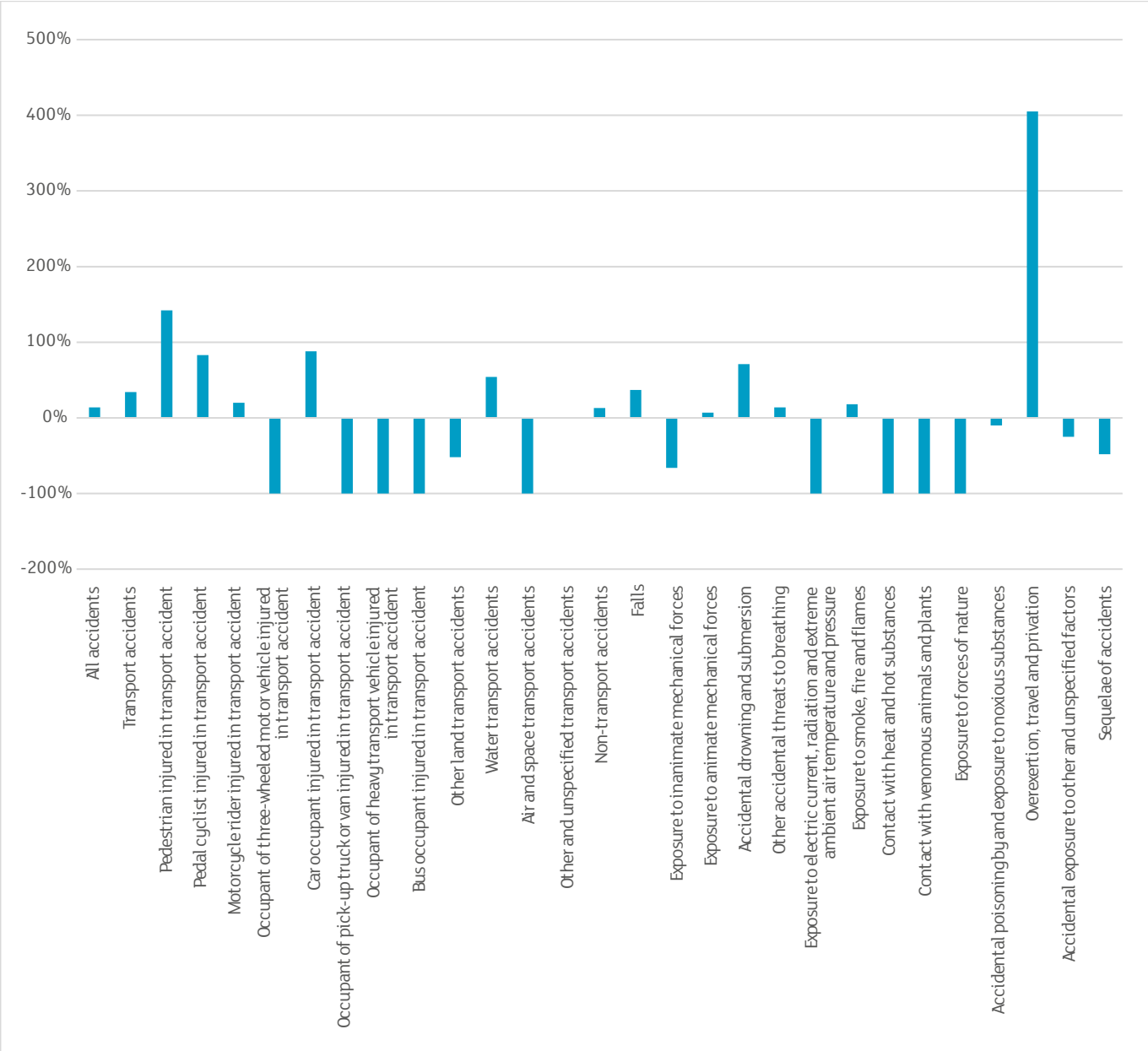
Northern Ireland

Northern Ireland's accidental death rate is 14% higher than the UK's as a whole. Its rate of deaths due to transport accidents is particularly high, at +34%; pedestrian deaths are +134%, pedal cyclists +83%, motorcyclists +20% and car occupants +88%. The rate of deaths due to non-transport accidents was 13% higher in Northern Ireland than in the UK as a whole, largely due to the rate of fall deaths being 37% higher; some types, like exposure to inanimate objects, are less common (-66% in this case and -10% in the case of accidental poisonings). The rates of most other types of non-transport accidents are higher than in the UK, with accidental drownings being especially high, at +71%.[15]

As with both Scotland and Wales, these disparities need further investigation, and we would encourage the Northern Irish government to commission studies into these differential accident rates relative to the wider UK.

Figure 57: Difference in per capita accidental death rates in Northern Ireland compared with the UK, 2022

Source: Appendix 1, Table 10.6



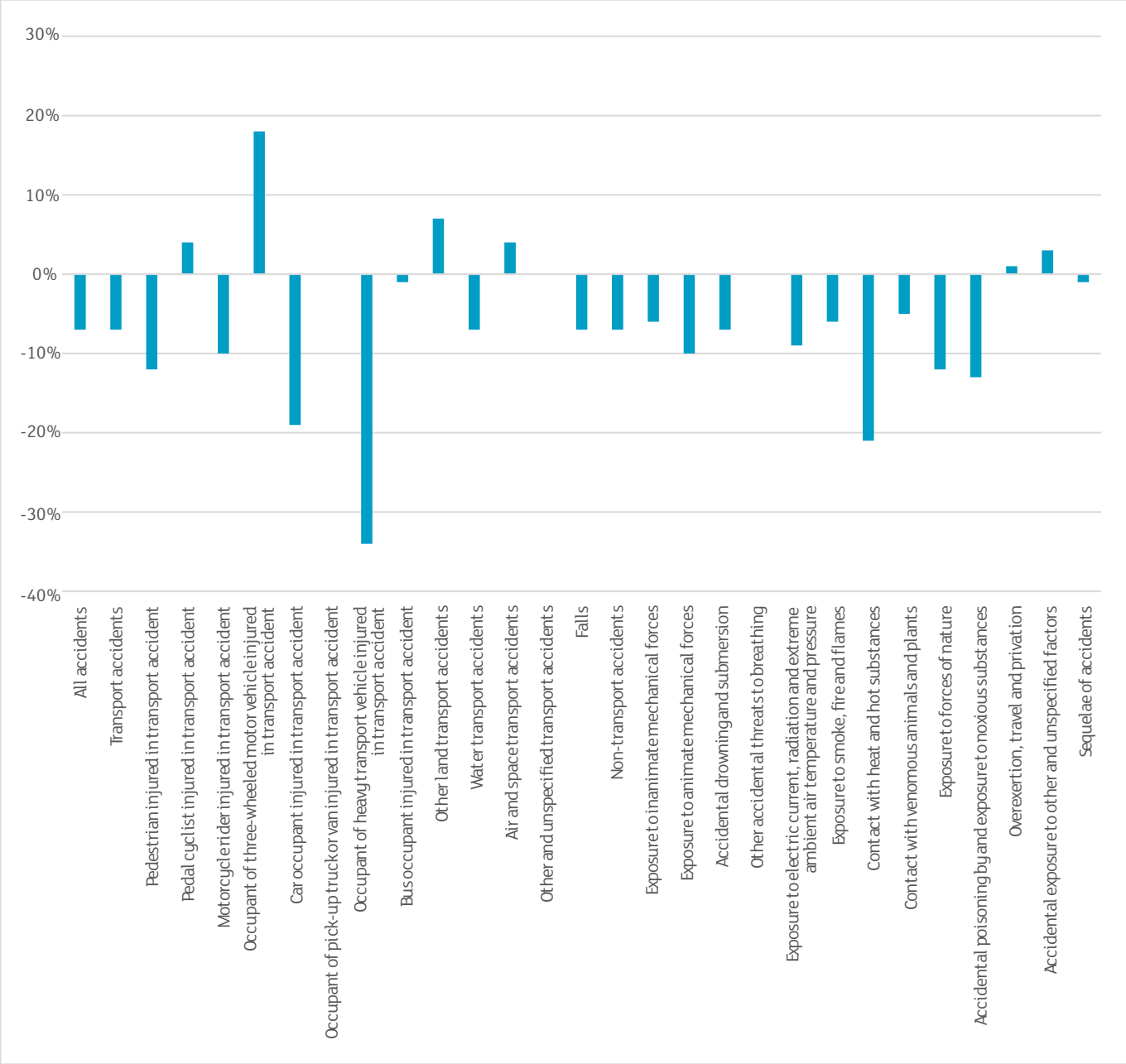
England

Finally, compared to the rest of the UK (Scotland, Wales and Northern Ireland), England has a 33% lower rate of accidental deaths. There is a lower rate in most categories of accidental death. The rate of deaths due to transport accidents is 31% lower; it is even lower among pedestrians (-47%), motorcyclists (-41%) and car occupants (-60%), though it should be noted that the rate for cyclists is much higher than in the rest of the UK (+34%).[16]

The rate of non-transport accidents was 33% lower than the rest of the UK, with falls 32% lower. Similar differences are found in exposure to inanimate and animate forces (-31% and -43%), as well as accidental drownings (-34%), exposure to electric current (-38%), and exposure to smoke or flames (-31%). The rates were even lower for contact with heat and hot substances (-63%), accidental poisonings (-50%) and exposure to forces of nature (-46%).[17]

Figure 58: Per capita accidental death rates in England compared with the UK, 2022

Source: Appendix 1, Table 10.6



Next steps: monitoring and collaboration

To date, these disparities have largely gone unnoticed because UK-wide data is not collected and rates in the four nations are rarely compared. RoSPA argues that these findings highlight the need to take a holistic approach across all four nations, while also recognising disparities between them. They demonstrate how accidents don't 'just happen', but occur at different rates in different places – just like how Chapter 10 showed that they also have social and economic determinants.

For all four nations, sharing data and making data as compatible (and comparable) as possible would help to facilitate further investigations into the causes of these differences. We therefore recommend:

Policy recommendation

- Establishing an agreed standard for recording and publishing directly comparable causes of death and hospitalisation statistics
- Creating a joint accident observatory to use this data to monitor trends across and within the four nations
- Commissioning research into the causes of national disparities in accident rates.

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[1] Appendix 1, Table 10.6.

[2] It is worth noting that the rate of transport accidents classed as 'other land transport accidents' is 4 times higher in England than in Scotland, so it is possible that some of the difference between different rates of sub-types of transport accident could be accounted for by better recording in Scotland. However, this is still not sufficient to explain the difference: even if we assume that all of England's 'other land transport' fatalities were really car occupants, for instance, the Scottish rate would still be 32% higher than England's rate (1.8 v. 1.4) without even accounting for Scotland's own 12 'other land transport' fatalities, which, under the same assumption, would further widen the gap.

[3] Mick Braddick, *Scottish Needs Assessment Programme: Road Traffic Accidents in Scotland* (Glasgow, 1995), p. iii.

[4] The A9 Safety Group, quoted in Steven McKenzie, 'Why Is There a Row over Scotland's Longest Road', *BBC News, 9* August 2023; Steven McKenzie and Iain MacInnes, 'Crash Deaths on Notorious Section of the A9 Reach 20-Year High', *BBC News*, 6 December 2022.

[5] Transport Scotland, 'Comparisons of Scottish Figures against Those of Other Countries', 2021 (retrieved 4 June 2024).

[6] Appendix 1, Table 10.6.

[7] Water Safety Scotland, *Scotland's Drowning Prevention Strategy 2018 to 2026* (2018).

[8] Christopher Sleight, 'Scotland Has Highest Accidental Drowning Rate in UK', *BBC News*, 21 June 2022.

[9] Scottish Government, 'Building Standards – Standard 2.15 Automatic Fire Suppression Systems: Cost Benefit Analysis', 23 May 2023.

[10] Appendix 1, Tables 9.4 and 10.6.

[11] Scottish Government, *National Mission on Drug Deaths: Plan 2022-2026* (Edinburgh, 2022):

[12] Allison McCann and Mary Turner, 'As Scotland's "Trainspotting" Generation Ages, the Dead Pile Up', The New York Times, 7 August 2019.

[13] Appendix 1, Table 10.6.

[14] *Ibid.*

[15] *Ibid.*

[16] *Ibid.*

[17] *Ibid.*

Case study

Brian, 50, is a sales manager for a printer and photocopier company. He lives near Stansted with partner Rachel Holmes, 42, a personal assistant. He says:

It was a warm Sunday and as I was walking to and fro with my Flymo lawnmower, I stepped backwards and my foot caught on the stairs of my grandson's trampoline. Earlier I'd spilt some water from a paddling pool onto that patch of grass. I'm not sure if my sliders slipped on that water and contributed to what happened, but next thing I'm falling backwards. Rather than letting go of the handle to turn off the engine, I grabbed it tighter to try and steady myself and brought the lawnmower towards me.

I felt a searing heat in my right foot and knew straight away that I'd lopped off some toes. Rachel came running into the garden, she saw the blood and grabbed a tea-towel to staunch the flow from my foot and then retrieved the two severed toes and put them in a glass of ice.

An ambulance arrived, the paramedics gave me morphine, put me on a drip and within the hour I was in hospital. I assumed that the doctors would be able to sew my toes back on but after two lots of surgery, sadly, two of my toes are gone forever. The blade also went right through to the bone on my big toe but that was saved.

I was in hospital for six days in order to be monitored and make sure the wound was not infected. After that, I had to wear a protective boot for several weeks. Work-wise, I've been able to do bits from home but I work on commission and as I've not been able to drive to appointments, I've lost a few thousand pounds in the time I've been injured. I'm hoping to get back to work very soon.

CHAPTER 12

Empowering communities

Empowering communities

Throughout this paper, we have been calling for a national strategy, because a top-level strategic approach is needed. Accidental injuries are a national problem and the solutions we propose here need to be backed by the weight of Central Government. However, the national and the local are not in complete dichotomy. Most of the policies we are proposing here will ultimately require local implementation, meaning that local authorities, police forces, fire services, NHS organisations, and many other local agencies will need to be empowered to deliver against the national strategy. This will include giving them powers, funding and political support.

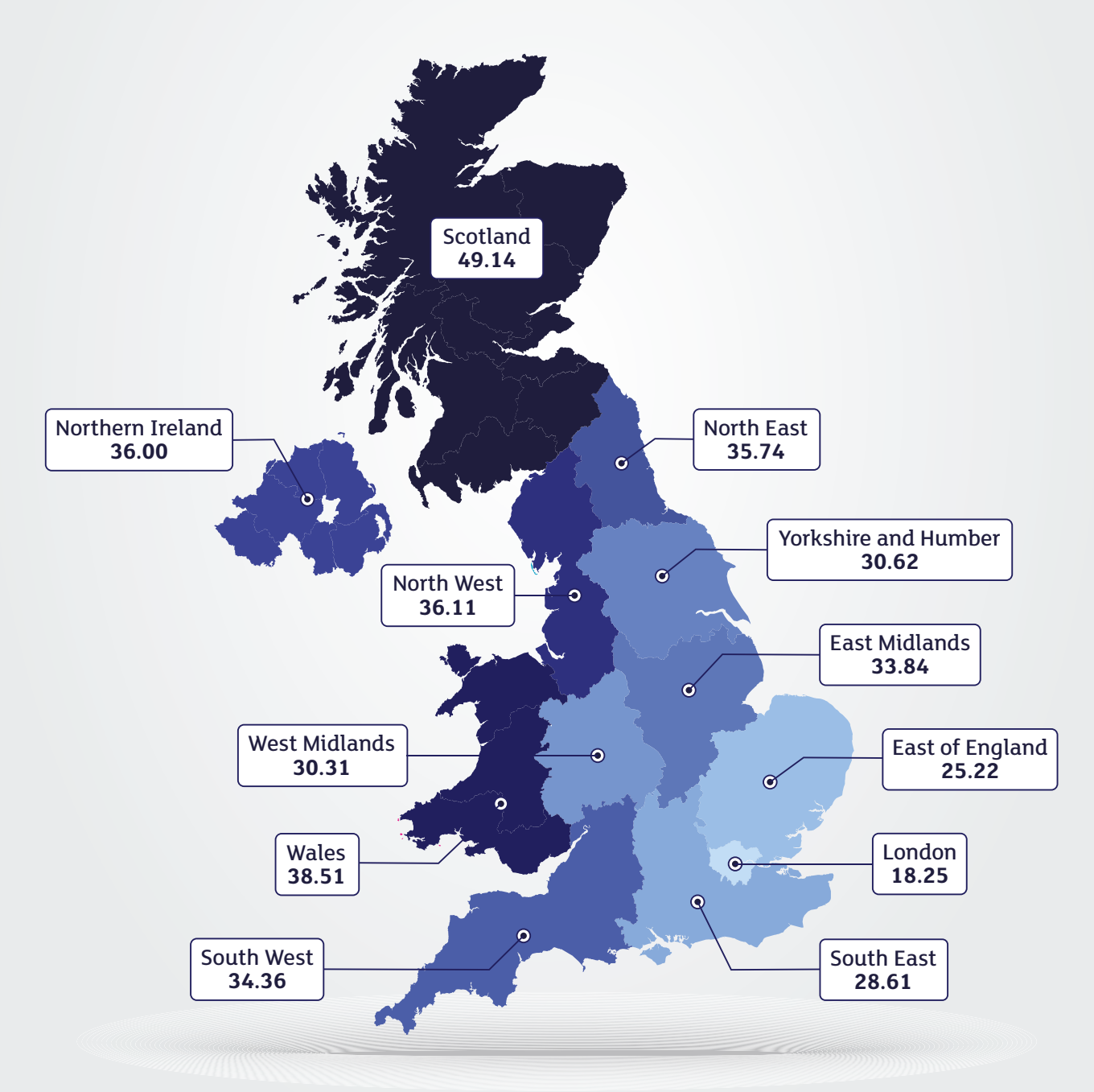
There's another dimension to this as well. Accident rates vary between regions and localities, just as they vary between demographics (as explored in Chapter 10) and nations (as we saw in Chapter 11). The rate and profile of accidents in an area will relate to a host of local characteristics which means that a 'one size fits all' approach will not always work: local insights and community buy-in will be necessary to shape interventions on the ground. As such, we should not view accident prevention purely in a 'top down' approach, with local authorities merely implementing what Central Government demand of them. We need to recognise that policies and implementation will need to be shaped from the ground up too, from the outset, and should be based on a partnership between Central Government and local authorities, otherwise we run the risk of the strategy falling short when it confronts the real world. Gaining insights from local communities and empowering them to make decisions about their own health will be vital to the success of the strategic approach we're campaigning for.

Regional and local accident rates

We have already pointed out the disparities between the four nations in terms of accidental death rates (see Chapter 11). Even within England, there are significant regional and local disparities too, as Figure 59 shows.

Figure 59: Accidental death rates: English regions and Scotland, Wales and Northern Ireland, 2022

Source: Appendix 1, Tables 3.2 and 13.2



In sum, the rate of accidental deaths is generally much higher in the north of England than elsewhere in England, and it is lower in London than in every other region. The following points summarise the disparities we have uncovered (all data is from 2022):

- The rate of accidental deaths is 31% higher in the **North of England than the South**[1]
- The rate of accidental deaths is 72% higher in areas of England **outside of London** than in the capital[2]
- The North West has the **highest rate of accidental deaths per capita of any English region** – approximately double the rate of London (which has the lowest per capita rate)[3]
- The **region with the highest number of accidental deaths** is the North West, followed closely by the South East[4]
- The West Midlands has the **highest number of accidents in the Midlands**, but the East Midlands has the highest per capita rate[5]
- The South West has the highest per capita rate in the South; the South East has the highest number of accidents.[6]

There are already significant economic and health inequalities between regions, especially between the North and the South and between the metropole and the provinces. These findings add to that picture, by showing that this extends to accidents. Indeed, given that accidents can cause people to leave work, miss time off school or suffer from long-term health problems (including mental health issues), it seems likely that the higher accident rates in these regions are both caused by and compound existing inequalities.

Accidental death rates also vary between localities, as table 3 highlights. The place in the country with the highest rate of accidental deaths – Tameside (in Greater Manchester) – had a rate almost six times as high as the authority with the lowest, Tower Hamlets. When standardising for age (to reflect underlying differences in the age profile of an area), Tameside still comes top – with a rate still almost six times as high as the place with the lowest rate (another London borough, Merton; Tower Hamlets still has a standardised rate almost three times lower than Tameside's). So, although an area's age profile can skew the accident rate, these standardised figures indicate that age is likely not the only factor explaining differences between local authorities.

Table 3: Accidental death rates by county and unitary authority in England and Wales (10 highest and 10 lowest rates)

Source: Appendix 1, Table 14

Local authority (county or unitary authority)	Rate per 100,000 people (non-standardised)	Region/nation
Highest accidental death rates		
Tameside	58.0	North West of England
Cornwall	57.0	South West of England
Blaenau Gwent	57.0	Wales
Pembrokeshire	55.0	Wales
Blackpool	52.0	North West of England
Neath Port Talbot	51.0	Wales
Caerphilly	51.0	Wales
Wirral	49.0	North West of England
Conwy	49.0	Wales
Swansea	49.0	Wales
Lowest accidental death rates		
Tower Hamlets	10.0	Greater London
Thurrock	11.0	East of England
Barking and Dagenham	11.0	Greater London
Merton	11.0	Greater London
Newham	12.0	Greater London
Wandsworth	12.0	Greater London
Waltham Forest	14.0	Greater London
Southwark	15.0	Greater London
Barnet	15.0	Greater London
Redbridge	15.0	Greater London

Much more work is needed to understand and explain these regional and local disparities. NAPS should account for them and Government must carry out research into the underlying causes of these different rates.

Policy recommendation

- Government should fund research into regional and local disparities in accident rates.

The role of local authorities, agencies and communities

These disparities illustrate why a national strategy must be informed by and support localities. We take the view that local authorities and the communities they serve are the best placed to deliver change within their areas.

There is already good advice about how local authorities can do this, like that put forward by Public Health England regarding accident prevention in young children.[7] Their document provides clear guidance on what should be done in communities, including a four-step plan for developing and implementing injury prevention strategies, as well as advice on leadership and coordination. The four steps are: (1) identify the current state of play in terms of local partners, current strategies and casualty data; (2) agree on where to go next and what the underpinning values and reasons for change are, identify national policy drivers, set a vision, and identify how departments can work as stakeholders; (3) agree on how to move forward, including evidence review, capacity, training needs, intervention design, and evaluation and monitoring; and (4) set performance indicators to know when the goals have been met, and evaluate and monitor impacts.

However, very often a local authority's capacity to deliver change is limited by ever-tighter budgetary constraints, which are often compounded by differences in funding and the tax base between areas. We have already seen how, for instance, trading standards departments have had their workforces cut by substantial amounts over the last decade and a half (see Chapter 7) and how hundreds of leisure centres and public swimming pools have closed in recent years (see Chapter 8). We have also seen how regulations need tightening and local authorities need better support to deal with unsafe housing, especially in the private rented sector (see Chapter 6). We've seen how locally oriented child accident prevention programmes have proven to be successful and cost-effective, but ultimately how the lack of permanent funding has forced them to be time-limited (see the last section in Chapter 6).

These are just some of the issues that are driving disparities in accident rates and holding back local authorities' capacities to deliver what their communities need. According to the Institute for Fiscal Studies, real terms funding per person for local councils is 18% lower than it was in 2010/11, as of 2024; but these funding cuts have not fallen evenly: funding per person is 26% lower in the most deprived decile, compared to 11% lower in the least deprived areas. As the IFS put it: 'this reflects cuts during the 2010s that hit poorer areas harder than richer areas – by design'. Improvements in funding since 2019 have not done enough to undo that damage, as these high levels of inequality and underfunding demonstrate.[8] As we have said already, the effects of these policy decisions will only further compound health and economic inequalities. Government must therefore improve funding for frontline local services and implement measures to reduce accidental injuries in local communities, giving the most support to those areas with the highest accident rates.

However, this is not just about funding and resourcing, even though they are vitally important. It's also about empowerment. In some areas, local authorities lack the power or political support to deliver changes that would make their communities safer. For instance, some local authorities have sought to reduce speed limits in their areas and also to reduce traffic flow through residential streets, often with safety as a key justification. We saw in Chapter 5 how reducing driver speed is one of the most important ways to prevent road casualties, especially concerning pedestrians. This is why 20mph speed limits and low-traffic neighbourhoods are becoming increasingly widespread.

However, we have also seen opposition emerge, not only from corners of the press, but also from Central Government; as one Department for Transport press release announced in March 2024, the last Government was in the process of launching a 'crackdown on anti-driver road schemes and blanket 20mph limits'

and vowed to 'put local consent first'.[9] The issue is already politicised and this combative language from Government puts pressure on local authorities to avoid implementing what are ultimately life-saving measures. It also obscures the fact that low-traffic neighbourhoods and speed limits are not inherently 'anti-driver', but are designed to save lives, including among drivers. Worse still, it implies a false dichotomy between drivers and others: drivers are also pedestrians and residents; many are carers or relatives for vulnerable people too, who are especially at risk of being injured on the roads. Everybody has a stake in improved road safety. We do strongly support the notion that local buy-in is needed but we also strongly encourage Government to take a more conciliatory tone, to work with local authorities and support them to lower speed limits where it benefits their communities. The Government should be putting across the case for saving lives, and showing leadership. Such an approach will be vital across all aspects of accident prevention, not just in transport safety.

Finally, Government needs to not only better fund and empower local authorities, but listen to them and learn from them. As NAPS is implemented, working with practitioners on the ground and ensuring that schemes are tailored to local needs and characteristics will be key to maximising the benefits of interventions. We strongly encourage working in partnership with and drawing on insights from these agencies.

Policy recommendation

- Government should set and promote guidance for local authorities on accident prevention, like that already produced by Public Health England to support the development of local childhood injury prevention strategies. Local authorities should use these documents to support the creation of plans and partnerships in their areas
- Government should provide staggered additional funding for key local services
- Government should empower local authorities to reduce accident rates in their areas
- Government should work in partnership with and gather insights from local authorities during the planning and implementation phases of NAPS.

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[1] Appendix 1, Table 13.2. Here, North = the North West, North East, and Yorkshire and Humber; and South = South East, London, South West, and East of England. Where we refer to the Midlands, we are referring to the East Midlands and West Midlands regions.

[2] Appendix 1, Table 13.2

[3] *Ibid.*

[4] *Ibid.*

[5] *Ibid.*

[6] *Ibid.*

[7] Public Health England, *Reducing Unintentional Injuries on the Roads among Children and Young People under 25 Years* (London, 2018). The National Institute for Health and Care Excellence has called for local authorities to include injury prevention in their plans for children's health in their areas: National Institute for Health and Excellence, 'Unintentional Injuries: Prevention Strategies for Under 15s', Public Health Guidance no. PH29 (2010).

[8] Kate Ogden and David Phillips, 'Core Funding for English Councils Still 18% Lower Per Resident than in 2010–11, and Costs Are Rising', *Institute for Fiscal Studies,* 7 June 2024.

[9] Department for Transport, 'Crackdown on Anti-Driver Road Schemes and Blanket 20mph Limits to Put Local Consent First', 17 March 2024.

CHAPTER 13

Leading the world?

Leading the world?

Accidents are a major health problem worldwide, resulting in millions of deaths annually. The burden tends to fall hardest on lower- and middle-income countries. Historically, the UK has been a world-leader in reducing accidents, enabling it to drive innovation globally and export its knowledge around the world. RoSPA has been key in this and remains a pioneer in delivering international health and safety solutions, from training to consultancy. In recent years, however, the UK's rising accident rate and the lack of policy innovation in accident prevention on the part of Government are allowing other countries to get ahead. Only by adopting a National Accident Prevention Strategy can we hope to regain our lead.

Accidents: the global context

Across the world, accidents are a major cause of death, injury and disability. 5% of all global deaths were the result of accidents in 2021, amounting to 3.1 million fatalities, up by 8% since the millennium.[1] This makes accidents the sixth-leading cause of death worldwide, after heart and lung diseases, lung infections, cancers, and other infectious diseases.[2]

Over a third of accidental deaths (38%) are the result of road incidents,[3] while a further 20 to 50 million people are injured in road incidents annually; globally, they are the leading cause of death in children and young people aged 5 to 29.[4] 92% of the world's road fatalities occur in low- and middle-income countries, even though they have only 60% of the world's vehicles.[5] Falls are also a major cause of accidental death and injury: it is estimated that there are over 37 million falls serious enough to result in hospitalisation every year.[6] And, 330,000 people die of work-related accidents annually.[7] In 2020, there were also almost 700,000 residential fires recorded in one sample of 34 countries, suggesting many millions occur annually around the world.[8] There are also 236,000 drowning deaths annually,[9] with low- and middle-income countries accounting for 90% of unintentional drowning deaths, mostly in the West Pacific and South-East Asia.[10]

Globally, the threat of climate change (discussed in depth in Chapter 9) is a major cause for concern in relation to accident rates. In the US, for instance, high-tide flooding is 300% more prevalent than 50 years ago;[11] around the world, additional coastal flooding and rising sea levels will cause 73 million more people to be living in flood plains by 2100.[12] Fires, heat stress and exhaustion are likely to increase as global temperatures rise.

The UK's changing place

Against this wider context, the UK's progress over the last century is undoubtedly impressive. For instance, it has one of the lowest road fatality rates in Europe,[13] and has seen impressive declines in workplace fatalities and unintentional drownings (see Chapters 4 and 8). Its workplace health and safety regime is often cited as world-leading and has been looked to for many years as an exemplar in its field (see Chapter 4). However, the UK has rested on these hard-won laurels for too long. While it's true that gains have been impressive in some areas, the UK's rising accident rate overall, especially outside of work, is undermining decades of progress.

Complacency, distraction and a fragmented policy landscape are major factors in this slow decline. We've seen, for instance, how a long period of stagnation on road fatalities has occurred alongside a decade of limited engagement from Government (see Chapter 5). We've seen how the Government has no plan for dealing with rising accident rates – and few in Government are likely even aware of the scale or cost of the problem. We've also seen how new challenges are emerging, as the UK's population ages, the climate heats up and new technologies arrive – and yet, no strategy is in place to deal with the impacts these trends pose for accident prevention.

The UK is therefore losing its lead. There are, in fact, countries which are continuing to innovate – and are now outpacing and outmanoeuvring the UK in the race to reduce accident rates. While the UK muddles along without a plan, several countries have adopted national strategies. These include:

- **India,** which in 2024 launched its National Strategy for the Prevention of Unintentional Injury as part of a broader commitment to reducing injury-related deaths and disabilities. This major initiative, developed in collaboration with the World Health Organization and the George Institute for Global Health, focuses on traffic accidents, drownings, burns and falls in vulnerable groups (children, workers and older people). The strategy is rooted in collaboration between government departments and external stakeholders, and promotes research, community engagement and joining up injury prevention with wider health policy programmes.[14]
- **Australia,** which is developing its own *National Injury Prevention Strategy* for the period to 2030. This focuses on reducing accidental deaths and serious injuries in high-risk populations. It addresses traffic accidents, falls, poisonings, drownings, burns, workplace injuries and sports accidents, as well as intentional injuries. It accounts for climate change, urban planning issues and differential accident rates among minorities (including Aboriginal populations). It calls for multi-sector collaboration across health, transport, planning and social services.[15]
- **Finland,** which launched its *Safe and Incident-Free Daily Life 2025* action plan in 2019. It aims to reduce accidents by increasing safety awareness and improving rescue service cooperation. It aims to promote safety so as to make it equally achievable regardless of socioeconomic background. It focuses heavily on behavioural change and promotes strengthening safety skills in vulnerable groups, and improving collaboration between authorities.[16]

If the UK Government is serious about promoting the UK's place in the world, being at the cutting edge of innovation, and reducing illness and injury among its population, it now needs to look to these countries to understand how to do it. They are taking a holistic, joined up, strategic approach to accident prevention, tailored to national and local needs, addressing future challenges and recognising inequalities.

This is what the next generation of accident prevention policy looks like. As these approaches are starting to emerge around the world, the UK must act now: not only to reverse years of rising accidental deaths and injuries, not only to reduce health inequalities and make the UK a safer place to live in, and not only to save the economy and the taxpayer billions of pounds annually. It must also do it to ensure that the UK remains a world-leading centre of health and safety innovation.

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[1] World Health Organisation (WHO), Global Health Estimates: Leading Causes of Death (Geneva, 2021)

[2] *Ibid.*

[3] *Ibid.*

[4] WHO, 'Road Traffic Injuries', 23 December 2023

[5] WHO, 'Road Traffic Injuries', 23 December 2023

[6] WHO, 'Falls', 26 April 2021

[7] International Labour Organisation, 'Nearly 3 Million People Die of Work-Related Accidents and Diseases', 26 November 2023

[8] CTIF, *World Fire Statistics*, no. 27 (2022), tables 1.4 and 1.5.

[9] WHO, 'Drowning', 25 July 2023

[10] WHO, 'Drowning', 25 July 2023

[11] Rebecca Lindsey, 'Climate Change: Global Sea Level', *Climate.gov* (NOAA), 22 August 2023

[12] These are areas with a 1 in 20 chance of flooding: UN Development Reports, 'Climate Change's Impact on Coastal Flooding to Increase Five Times over This Century', 28 November 2023

[13] Department for Transport, 'Reported Road Casualties Great Britain, Annual Report: 2023', 26 September 2024.

[14] See, for instance, The George Institute for Global Health, 'National Strategy for Prevention of Unintentional Injury Launched at Safety 2024' (retrieved 4 October 2024).

[15] The latest draft is here: Australian Government, *National Injury Prevention Strategy 2020–2030: Consultation Draft* (Canberra, 2020).

[16] Ministry of the Interior, *Safe and Incident-Free Daily Life 2025* (Helsinki, 2019).

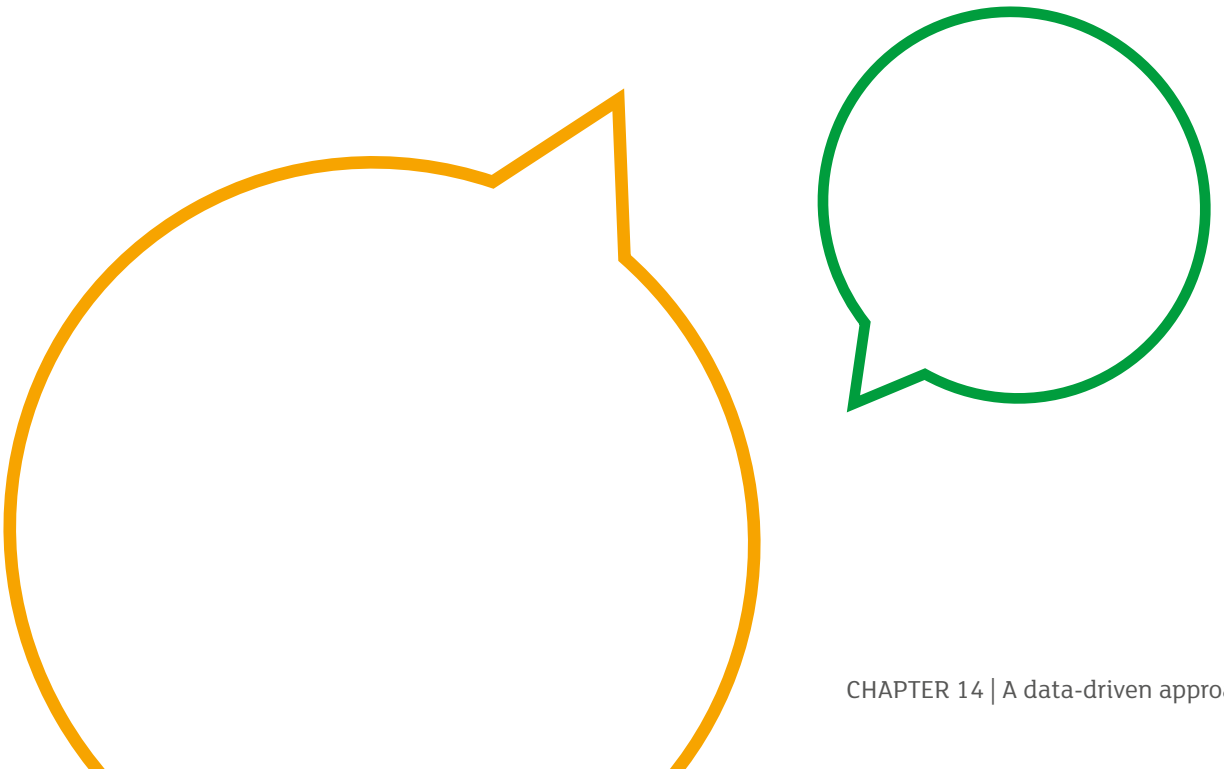
CHAPTER 14

A data-driven approach

A data-driven approach

This report presents the first 'state of the nation' look at the burden of accidents in the UK – from its economic costs to its human impacts. We have already highlighted numerous areas that require urgent attention if the UK is to arrest its accident crisis. At the outset, we stated that good accident prevention relies on scientific methodologies. Accidents and the injuries they cause are ultimately public health problems, and solving them requires data, investigation and analysis. Good data should be used for setting priorities and identifying new issues, monitoring interventions, evaluation, and raising awareness and promoting action. A National Accident Prevention Strategy (NAPS) must embed these principles into it – it needs to be data-led, backed by monitoring programmes and measured against sensible targets. Below, we outline steps that need to be taken to ensure that NAPS would be evidence-led from the outset.

We also point to a host of holes in the UK's existing data collection regime. Because, while the UK does have a range of datasets that have enabled us to build this picture of accidents today, time and again when writing this report it became clear that there are many critical gaps. We outline these below and suggest solutions. In many cases, it is a case of Government publishing data it already holds, strengthening guidelines for data producers, or working more consistently across the nation.



Guiding approach

Ensure evidence-led approach is embedded in NAPS

Accidents are a public health problem. They cause injury and disease, the consequences are treated medically, and they are preventable. As outlined in Chapter 2, medical consensus is that public health problems like accidents can be prevented using scientific methods, which rely on surveillance, hypothesis-testing, intervention and evaluation. NAPS is about guiding interventions, so it's essential that surveillance, testing and evaluation be embedded in it – so that those interventions are guided by evidence rather than imagined up arbitrarily.

We discuss the testing part below, but at this stage it is essential to state that Government must embed these public health principles into NAPS and use them as a guiding hand.

Further, in order to survey accident rates and evaluate interventions, Government needs to have consistent ways of reliably monitoring accidents; NAPS should therefore include plans on how accidents will be proactively tracked. At the same time, Government should also set sensible targets to drive forward change and evaluate success, and it should outline its progress in regular formal updates so that researchers can understand progress and identify (and learn from) successes and failures.

Policy recommendation

- Embed the principles of the public health theory of accidents into NAPS
- Plan for how accidents will proactively be monitored
- Create realistic targets for accident reduction
- Publish regular updates (e.g. annual reports) on accident rates and reduction efforts under NAPS.

Bring expertise into the heart of NAPS

To guide the implementation of this approach, we want to see Government appoint an independent expert advisory committee on accident prevention to support the development and implementation of NAPS, to provide consultative resource for Government during policy development, and to act as a critical friend.

Policy recommendation

- Government should set up an independent expert advisory committee on accident prevention to support the content and implementation of NAPS.

Undertake a review of accident statistics

In order to effectively monitor accident rates, Government needs to work to create a more consistent and rigorous approach to data collection and monitoring. At present, there are a range of datasets collected by different agencies, using different methodologies and published in different ways; they are not always joined up and this makes interpreting them difficult. Often, there are gaps (as we will see later in this section). For instance, we currently have:

- Cause of death data published by the four devolved national statistics agencies, published using ICD codes;
- Hospital admissions data published in different ways (or not at all) by the four nations' NHS or public health agencies (England and Wales using ICD codes, Scotland publishing only some accidental injury data but not external cause data; Northern Ireland publishing nothing);
- Highly variable and generally low-quality A&E data from the national NHS agencies, which provide top-level statistics on numbers of injuries, but do not specify whether an injury was accidental or not; many cases have no diagnostic information recorded at all;
- Data on fire deaths collected separately across the four nations and published by individual devolved governments or national fire agencies;
- Data on road incidents collected by the police across Great Britain (but not Northern Ireland) and published by the Department for Transport using a unique reporting system;
- Data on child deaths (not exclusively accidents) collated by the National Child Mortality Database;
- Data on drowning deaths (not exclusively accidents) collated by various maritime agencies, coroners' reports and emergency services' reports, and published in the National Water Safety Forum's WAID database
- Data on workplace accidents collected by the Health and Safety Executive, though not using ICD codes for accident types
- Individual, often ad hoc, research outputs concerning specific scenarios or accident types.

On the face of it, this seems like a wealth of data, yet these datasets are compiled using different methodologies, are published separately (often to different timelines), and are designed for different purposes. Even where coverage is good, e.g. cause of death data, methodological issues mean that some accident types are recorded with little detail, making intervention harder – 13% of accidental deaths have a cause of 'exposure to other or unspecified factors', while 35% of all fall-related hospital admissions are classified as 'unspecified fall', rather than the 19 different categories of fall types available in the database. This all makes interventions harder to develop. Additionally, often Government publish only selected tabulations of the data, meaning some useful data goes unpublished and needs to be commissioned at cost to access it (see below). There are also many areas, like product safety, for which we have simply no data: we cannot say how many people were injured by specific products, because that data is not being collected.

Government needs to take stock of what is out there and look at how data collection, publication and monitoring could be improved and made more consistent across agencies. We recommend that it commission an independent, expert review of accident statistics in the UK which should produce recommendations to this end.

Policy recommendation

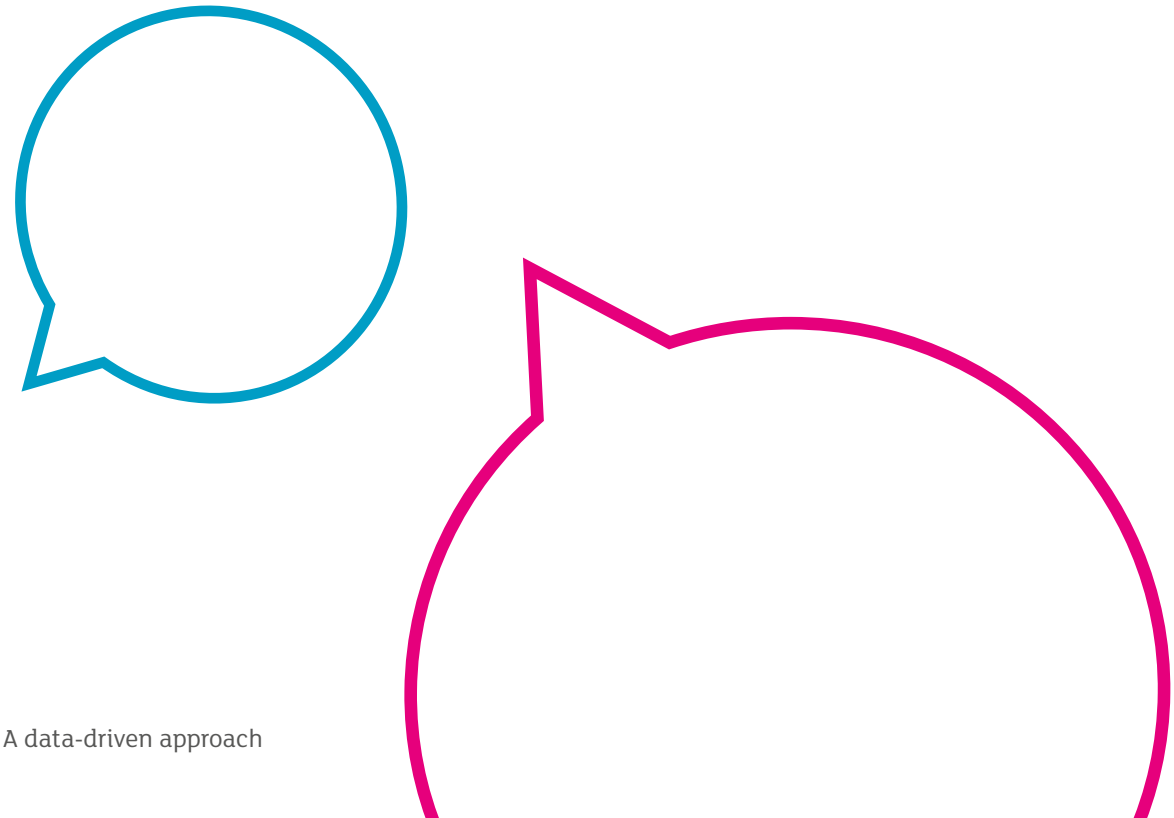
- Government should commission an independent, expert review of accident statistics which should produce recommendations to Government on how data collection, publication and monitoring could be improved.

Establish a fund to support research into accidents

In some cases, we simply don't have the data or knowledge to help understand a problem or assess potential interventions. Researchers can apply for existing pots of research funding, but they will be competing with a range of other topic areas and allocation of funding is therefore ad hoc and not guided by an overarching strategic approach towards accident prevention. We want to see Government set up a dedicated fund to support accident prevention research in areas where NAPS identifies critical gaps or need.

Policy recommendation

- Government should set up a dedicated fund to support research into accidents, including rates of accidental deaths, their causes and potential intervention
- NAPS should guide this funding by outlining key knowledge gaps which the fund should be designed to fill.



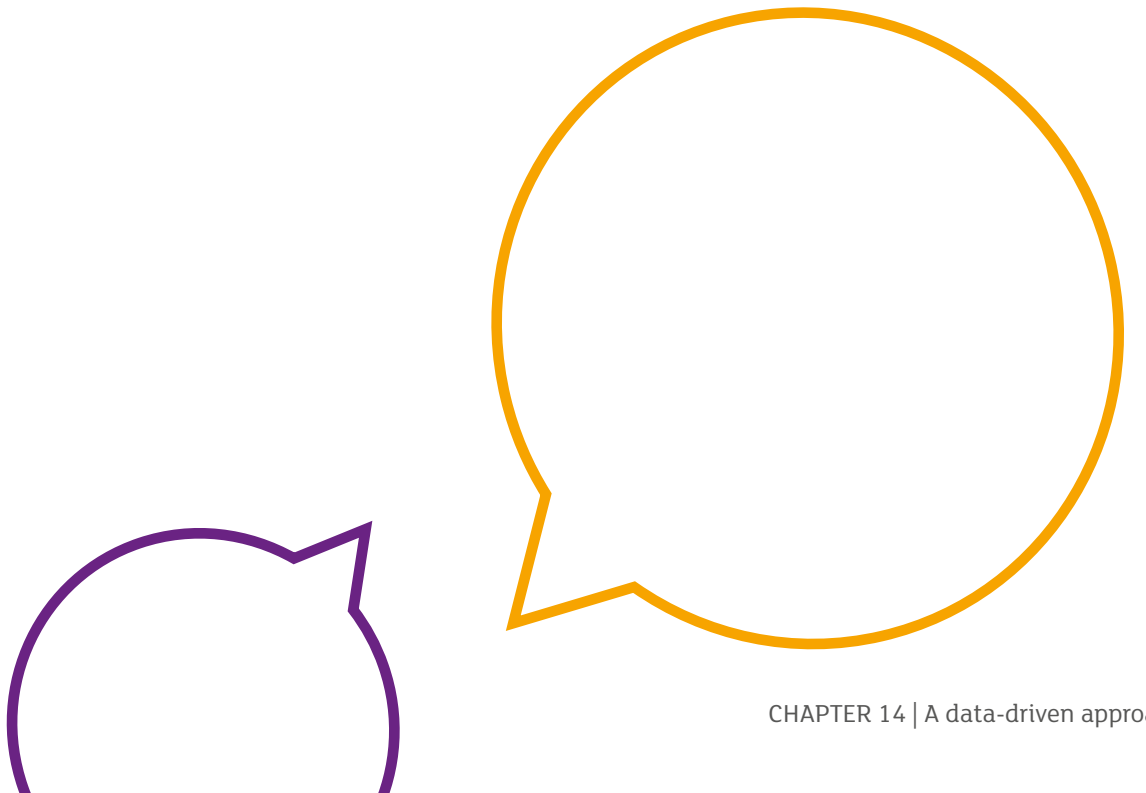
Understand how artificial intelligence can support accident prevention

In Chapter 9, we outlined some ways in which the rise of artificial intelligence may impact on accident prevention, including the ability for very large databases of accident data to be analysed by AI to discover trends and use them to predict accidents or develop interventions. This has the potential to transform how we approach aspects of accident prevention, both in terms of the richness of data and the means by which we develop preventative measures. We are already aware of some products and initiatives which are exploring this. For instance, the use of AI to discern patterns in massive quantities of vehicle data to find high-risk areas of roads, or the use of wearable technology in workplaces to develop data about stress and injuries.

The challenge for Government will be balancing privacy and other rights, with the benefits accrued through the use of this data to protect people. Government will also have to contend with issues around data ownership, access and protection. But it will also need to consider how AI's ability to develop predictive insights interfaces with existing public policy. For instance, fatality rates are often used to prioritise spending on making public roads safer. However, this means waiting until accidents have already happened, before deciding to fix the cause; if AI can uncover ways of predicting future accidents based on current near-misses or warning factors, discerned from big data, then the existing funding allocation process might actually be set up the wrong way round. Government must therefore undertake a study into how AI could be incorporated into accident prevention measures nationally and locally.

Policy recommendation

- Government must undertake a study into how AI and predictive technologies could be incorporated into accident prevention measures nationally and locally.



Specific data requirements

Alongside these broad, overarching themes, there are more specific data requirements that will need to be addressed from the outset.

Improved recording of causes of accidental deaths

Currently, the UK nations use a system for recording causes of death on death registers, which is based on a chain of causality. Where an accident is the underlying cause of the event, it is the trigger from which subsequent injury or disease emerged that led to death. The four national statistics agencies publish cause of death data based on these underlying causes. This is the best general accident data we have in the UK. However, there are aspects that could be improved.

For instance, in 2022, 84% of fatal falls were officially coded as 'other and unclassified falls' (W19), despite 19 other specific categories of fall being included in the ICD coding system. This introduces much uncertainty into the picture because it means we know little about the scenarios leading to deaths: was the fall on a stairs, or outside, or on a flat surface? Given that falls are the largest cause of accidental death, it is deeply frustrating that they are among the worst recorded. At the same time, many accidental deaths are simply recorded as being due to 'other and unspecified factors' (X59). This is also unhelpful – registrars should be offered more stringent guidance on better recording these causes.

Furthermore, we have asked the ONS to provide cause of death data which also includes location of accident data (the 'four-digit' version of the ICD code). This data is not routinely published, so we commissioned it. Analysis of it shows that before 2020 cause of death data was coded to include location of accident, which is extremely useful from a prevention point of view as it shows, for instance, whether an accident leading to a death took place at home, work, school, etc. However, since 2020 this data has not been recorded for any accidents – meaning a key piece of information has been lost. This change must be reversed.

Policy recommendation

- Government should issue new guidelines to registrars to ensure that they only use 'fallback' cause of death codes (e.g. W19, X59) at an absolute minimum and that more specific information as to the type of accident is sought and recorded on a death certificate.
- Government should resume the recording of 'fourth digit' cause of death data for accidents and should publish this data.

Understanding the economic impacts of accidents

At the beginning of this report, we highlighted the enormous costs of accidents to the UK, in terms of lost economic output, working days lost and costs to certain public services. However, obtaining this data has been challenging and the figures we provided necessarily underestimate the total costs. Yet, building a total cost is crucial to understanding not only the impact of accidents, but also the impacts of future interventions and the 'business case' for a strategic approach. We currently lack a good baseline.

To understand the costs, Government should conduct a study into the economic impacts of accidents, broadly construed. It should look at topics such as costs to the NHS and primary care, lost economic output and costs to employers, loss of spending in the economy and loss of earnings, workforce exits, knock-on effects for family and carers, and costs to a wider range of public services. It should also consider social costs and other less tangible impacts. This in turn would allow Government to understand the savings that could be generated through accident prevention measures.

In the meantime, aspects of Government's existing data collection and publication processes are not fit for purpose for understanding accident impacts and should be revised. For instance, the Labour Force Survey asks respondents to outline reasons for absence from work, but it groups together accidental injury among numerous other health issues – including the common cold; this means that we lack a good picture of the costs to business and employees of accidental injuries. Simply refining the list of options on the survey would unlock this potential. Likewise, Government doesn't record or report on why people leave the workforce, so we don't know how many people are forced to stop working each year due to an accident. These are foundational statistics, but aren't being collected – which in turn has made it hard both for Government to 'see' the costs and for experts to articulate to Government the 'business case' for intervention.

Policy recommendation

- Government must commission research into the economic costs of accidents in the UK
- Government should improve data collection around workplace absences due to accidents (by amending the Labour Force Survey) and should seek to understand the number and cost of workplace exits annually due to accidental injury.

Product safety data: revive HASS/LASS

As outlined in Chapter 7, the UK currently does not record information about injuries caused by specific products. We used to do this very well using the Home and Leisure Accident Surveillance System (HASS/LASS) which recorded details of home- and leisure-related accidents at a sample of hospitals in the UK, at the cost of roughly £1m annually.[1] It was pioneering and helped medical practitioners, trading standards officers and government to identify, regulate and remove from circulation dangerous products. However, after 25 years, funding was removed for HASS and LASS in 2003 and since then there has been no proper monitoring of accidents caused by product safety issues.[2] Since then, there have been significant changes to trading standards departments and the emergence of internet shopping which has brought about an enormous and rapidly changing online marketplace for imported products which are often not safe. The lack of HASS/LASS means that we are currently 'flying blind' without the data to know which products are unsafe and where we should be targeting ever-scarce enforcement resources.

Reviving HASS and LASS would allow trading standards departments to better monitor emerging threats to public safety with the resourcing they have. It is not a 'magic bullet', but it would be a quick and cost-effective way of empowering officials to track trends, judge priorities, quickly spot new threats and remove unsafe products from circulation. In the process, we expect it to save lives, reduce injuries and, in turn, reduce some of the pressure on the UK's overstretched NHS.

Policy recommendation

- Government must revive the Home and Leisure Accident Surveillance System to collect data on accidents at home and during leisure activities, including information about products involved
- This data should be made available to Trading Standards, regulators, safety practitioners, NGOs and researchers to support future targeted interventions.

Cross-nation consistency on data publication

Chapter 11 highlighted the disparities in rates of accidental death and injury between the nations. We want to see more work towards sharing data and making data as compatible (and comparable) as possible. This would help to facilitate further investigations into the causes of these differences. We therefore recommend:

Policy recommendation

- Establishing an agreed standard for recording and publishing directly comparable causes of death and hospitalisation statistics
- Creating a joint accident observatory to use this data to monitor trends across and within the four nations
- Commissioning research into the causes of national disparities in accident rates.

Improved recording of accidents in A&E data

For England, summaries of A&E situation reports are published annually, but unlike admissions data these are much more simplistic. The underlying recording software used in A&E departments does not use the ICD coding system and the data that is published is focused on presented diagnosis, e.g. the broad category of injury patients present with. However, this data does not include cause data – so it's impossible to know whether an injury is the result of an accident or deliberate.

We would therefore ask Government to work with the NHS to review existing data recording practices. We would like to see a system for logging ICD codes or at the very least high-level external cause codes against individual situation reports, which could then be published in A&E attendance data.

Policy recommendation

- Government should review A&E situation report recording systems with a view to amending them so that they include the ability for external causes to be recorded
- Government should then publish A&E attendance data including external causes.

Inequalities data for deaths and hospital admissions

As outlined in Chapter 10, we have only limited information on a national level about the connections between accident rates and deprivation, even though many studies show links in specific accident types or locations. This lack of data is all the more striking given that Government agencies do actually collect it in the first place. The national statistics agencies all record a person's usual residence at the time of death on a death certificate; if this address data could be mapped against the Indices of Multiple Deprivation, this could allow for the statistics agencies to analyse cause of death data in conjunction with deprivation data, providing, for instance, rates of accidental death by deprivation decile. This same approach could be taken with hospital admissions data. We would therefore ask that Government proactively publish data on accident rates by deprivation decile.

Likewise, as outlined in Chapter 9, ethnic minorities are often recorded as having a higher rate of accidental injury, however data is incomplete and research is limited. Government should be able to publish hospital admissions data relating to this topic, and should also support research into differential accident rates in minority groups.

Finally, regional and local differences in accident rates exist (see Chapter 12) but the causes of this are unclear; Government should fund research into what drives these inequalities.

Policy recommendation

- Government should proactively publish data on accident rates by deprivation decile.
- Government should publish hospital admissions data broken down by ethnicity, and should support research into differential accident rates in minority groups.
- Government should fund research into regional and local disparities in accident rates (see Chapter 12 for more discussion).

Data sharing

To help inform interventions at every level and support monitoring and research, Government should publish and share data relating to accidents and accident prevention wherever possible, including between departments, with local authorities, with relevant sector organisations and with the public.

Policy recommendation

- Government should publish and share data relating to accidents and accident prevention wherever possible, including between departments, with local authorities, with relevant sector organisations and with the public.

Road safety investigations

As outlined in Chapter 5, our picture of what causes road traffic collisions can often be limited, especially for non-fatal collisions, and there is no automatic means of making recommendations to authorities to prevent recurrence.

We are therefore calling on Government to introduce a Road Safety Investigation Branch. This was first announced by Government in 2022 but has yet to be set up. It would take an independent, rigorous and consistent approach to understanding causes of collisions, without having to assign blame or support prosecution. Its aim would be to understand why collisions on the road occur and take an evidence-led approach to preventing them recurring by making recommendations for change.

Policy recommendation

- Establish a dedicated body to investigate serious road incidents.

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[1] Running from 1978 to 2002, HASS/LASS ultimately captured data on 6.8m accidents. It collected data on details of the person who had the accident, including age and sex; details of what happened and where; the circumstances surrounding the accident (e.g. what was the person doing at the time); the injury or injuries caused by the accident; the involvement of products or other items in the accident; and the outcome (e.g. admission to hospital).

[2] RoSPA, 'Accident Statistics', archived at the Internet Archive on 24 February 2024.

Appendix

Readers can download the appendices referred to in this report by visiting https://www.rospa.com/campaigns-and-fundraising/current-campaigns/national-accident-prevention-strategy/report

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