



Climate Change

Introduction

In light of the COP26 global event in Glasgow, and the impact of climate change becoming ever more apparent across Scotland the UK, SCSN facilitated a workshop, to identify how climate change might affect community safety.

On Tuesday 19 October 2021, SCSN hosted and facilitated a 2-hour online workshop. Over 30 people attended from a spectrum of community safety organisations. Attendees included representatives from RoSPA, Scottish Fire and Rescue Service, Community Safety Partnership (CSP) Leads, SEPA, Neighbourhood Watch Scotland and the Scottish Flood Forum.

Structure

Prior to the workshop, SCSN identified 5 key impacts of climate change to explore in further detail with attendees. This was achieved through a rapid evidence review of policy documents, including the recent IPCC report on climate change (2021) and the UK Climate Risk Assessment (2021). The 5 areas identified and discussed in the workshop were (1) Increased Rainfall and Flooding, (2) Hotter Weather and Heatwaves, (3) Coastal Erosion, (4) Pests and Invasive Non-Native Species (INNS) and (5) Extreme Weather Events.

At the virtual workshop, participants were divided into 3 groups. Each group explored the above impacts of climate change in relation to (1) Home Safety, (2) Outdoor Safety and (3) Personal Safety. Splitting community safety into these 3 key areas enabled a broad, in-depth exploration of the potential impacts of climate change on different strands of community safety.

The workshop utilised 'Jam Board' as an interactive, real-time collaborative platform whereby all participants were able to share their thoughts and learn from each other,

simultaneously. The conversation was rich, creative and thought provoking, and practitioners shared their expertise in an open and relaxed environment. The findings of the workshop are summarised in the main body of this learning report. However, for reference and context, please read the below definitions of the 5 areas of climate change that were covered in the workshop, as well as brief definition of home safety, outdoor safety and personal safety.

Climate Change

The impact of climate change on Scotland and the UK can be viewed through 5 lenses; increased rainfall and flooding, heatwaves and hotter weather, erosion of the coastline, pests and INNS, and extreme weather events.



It is very likely that heavy precipitation events will intensify and become more frequent in most regions with additional global warming. Extended periods of heavy rainfall can have impacts, such as slope and embankment instability, flooding and effects on road and rail infrastructure.



Currently there are around 2000 heat related deaths per year in the UK, set to increase by 257% by 2050 where a summer as hot as in 2018 (joint hottest summer on record) for the UK could become normal summer conditions. It is anticipated that there will be more frequent / severe summer droughts which will affect public water supply and cause reduced water availability.



There are major implications for coastal communities due to flooding, in particular extreme coastal flooding from sea level rises and increased rainfall. It is anticipated that there will be increased loss of natural flood defences which will impact the flooding / erosion of coastal buildings.



There will be an increase in the capacity of existing UK mosquito species, able to transmit certain arboviruses that are harmful to human health. An increase in rats is expected, as well as flies, ticks, invasive garden ants, house flies, and mosquitos due to warmer, wetter weather and milder winters.



Human influence has increased the chance of compound extreme events, including increases in the frequency of concurrent heatwaves and droughts, compound flooding and successive storms. Over 50% of days could have a 'very high' fire risk in the peak months of the summer with increased chances of wildfire.

Community Safety



Definition of Home Safety

'Home Safety' refers to risks and potential dangers in and around a home which may cause bodily harm, injury, or even death to those residing in and around the physical structure of a home. Home safety includes a lot of things and can be divided into different categories. For example, slips, trips and falls, electrical safety, gas safety, product safety, fire safety and water safety. We already know the different kinds of issues that home safety faces at this point, but for the purpose of the workshop, we wanted to start thinking about how climate change might impact home safety in the coming years. For example, what does increased rainfall mean for home safety? What does higher temperature and warmer weather mean for home safety? What do increased numbers of pests mean for home safety? And what do extreme weather events such as successive storms, heavy rain and prolonged heatwaves mean for home safety?



Definition of Outdoor Safety

'Outdoor Safety' is undoubtedly an area that will be fundamentally affected by climate change. We have already begun to see this happening in Scotland with increases in flooding, fire and droughts from excessive heat, rainfall and storms. This is expected to increase, with coastal erosion also predicted to present significant risk in the near future too. When defining outdoor safety, we therefore think about risks and potential dangers to outdoor environments and activities. For example, might changes to our weather and natural environment bring higher risk to commonplace outdoor activities such as driving, walking and cycling? What are the increased risks to being outdoors in excessive heat? How will a rise in the numbers of pests and INNS manifest? How might infrastructure be affected and what could that mean?



Definition of Personal Safety

'Personal Safety' concerns the welfare of the self or the health – physical and mental – of an individual. It's a general, basic overview and a useful perspective, helping us

understand what changes in our environment might mean for citizens in more personal, intimate ways. Climate change will unquestionably impact the personal safety of our citizens, across all our communities. Weather extremes and climate change will have consequences for social mobility, job opportunities, health and access to services, public and personal transport, community cohesion and behaviours, and fundamentally shift the way we live our lives and interact with each other. The question we're keen to ask is; to what degree will increased rainfall, hotter and drier summers, erosion, pests and other climate extremes influence us? What can we do to prepare and mitigate against the adverse effects? Are there opportunities in the coming changes and things we can embrace or invest in now?

Workshop findings

Increased Rainfall and Flooding



Impact on Home Safety

People's **physical health** and wellbeing are at great risk from flooding in their home. People are in immediate danger of being trapped in their homes with rising flood water and gathering debris. There is also higher risk of **illness and disease** from dirty and contaminated water entering homes during flooding. There can be a long-term impact of **damp in homes** which impacts people's health and wellbeing over time. Flooding can also cause extensive damage to the internal and external fabric of homes which might lead to **long-term structural damage** and a lack of essential repairs, whilst also having an impact on home insurance premiums and affordability. This puts people with lower incomes most at risk of **financial insecurity** following floods. Lack of home insurance might lead people to try to make their own repairs too. This could put them at higher risk of **DIY accidents** or pressure people into purchasing cheaper and more unsafe replacements for lost possessions, or DIY equipment and materials (i.e., homemade sandbags to prevent further flooding). Flooded gardens can lead to cracked patios and paths which can pose as an **increased trip hazard**, particularly for older people who are already at higher risk of falls. In terms of **electrical safety**, flooding can cause power cuts and so people are at higher risk of falling over in the dark. In addition, there is potentially an increased fire risk in homes, as people

Heatwaves and Very Hot Days



Impact on Home Safety

The majority of homes in the UK don't have air conditioning or effective ventilation. Many homes are at risk of **overheating**. This puts people and domestic pets at risk, with elderly people most at risk of needing **hospitalisation** from overheating. People living in urban areas are even more at risk, due to the '**heat island effect**', a phenomenon whereby multiple environmental factors interact, resulting in an even hotter temperature within urban areas and homes. During heatwaves, people may decide to leave their homes, to seek others areas to cool down (e.g. lakes, shores and rivers), potentially **displacing accidents** from the home into outdoor environments instead. There is also a risk of more young **children falling from windows**, as windows will be left open in the hotter weather. Open windows also put properties at greater risk of **theft** and break-ins. In terms of garden safety, people may be at greater risk **of sunburns and skin cancer**. In addition, **burns** from outdoor fires, BBQs and over-heated outdoor surfaces could become more commonplace. There is potential for an increase in the number of **gardening accidents**, as well as more ticks in gardens due to warmer weather, putting people at greater risk of Lyme disease. **DIY accidents** could also become more frequent, whereby people take on household repairs / renovations (e.g. solar panels, air conditioning and ventilation), tackling complicated DIY tasks that they are not equipped or trained for (e.g. wrong tools and poor knowledge). Increased risk of wildfires is a threat to homes, wildlife and the environment. **Water shortages and drought** are a very real threat to areas of the UK and can put a strain on emergency services, in particular the fire service. A couple of workshop participants suggested that home safety visits could include assessment of **ventilation** in homes, and also perhaps a working from home safety assessment too.





Impact on Outdoor Safety

The danger of heatwaves and very hot days on outdoor safety is grave, linking directly to **drought and water scarcity** which increases chances of **forest and wildfire**. For Scotland, our participants identified this as a major threat to people and wildlife outdoors, due to risk of **death and unintentional harm** from fire. Of equal concern were **water-based accidents and drowning risk** as people access water to cool-off/participate in activities during hot weather. This cause of harm has already been recorded in Scotland and is increasing, in recent years. With warmer weather, more people will spend time outdoors to access the sun and so it follows that **heatstroke, sunburn and heat exhaustion** are increasingly probable for many. Warmer weather also brings the chance of **overcrowding** at natural beauty spots, which likely means increases in **littering, mess and anti-social behaviour**. **Infrastructure** could be affected by excessive heat in a number of ways, for example – melting tar on buildings and roads; public water supplies running low, rail tracks expanding and buckling. Each of these consequences will have knock-on effects to other areas, including **travel, accidents and community resilience**. Once more, participants forecasted long-term problems for communities from population movements, with vulnerable citizens most likely affected, and an overall reduction in **community cohesion**.



Impact on Personal Safety

Heatwaves are more frequent today than they have ever been, since modern records began, and this trend is forecast to increase. Hotter, more intense days in Scotland will have significant impacts on our communities, including our personal safety. For a country typically used to overcast, cold, wet weather, increases in temperature will present unique, unfamiliar challenges. For example, **homes designed for insulation and preserving heat will have to be adapted to help ventilate and cool** householders, particularly the older and more vulnerable. The same requirements will apply to **public transport, shared spaces and facilities, all needing modernised** to be able to maintain lower, safer temperatures with climate control. There will need to be **improved education and encouragement for use of sunscreen and time spent in the shade**, to prevent heat stroke and sunburn. **Hotter days will influence behaviours** too. People will spend more time near to or in water, leading to **increased risks of injury and drowning**. Parks and open spaces will become more desirable which – in turn –

may add burden and pressures on local authorities, responsible for cleaning and maintaining popular public spaces. This will stress local services, as demand for facilities like play parks increases. In rural areas, **risk of wildfire will also increase**, due to hotter, drier landscapes. Upsurges in visitors camping and participating in leisure activities will add to the need for education and awareness raising, highlighting personal responsibility and civic duty. But **there will be opportunities in a hotter Scotland too**, for the green economy and renewables sector, bringing jobs and businesses to communities, and with them new training and skills, money and support.



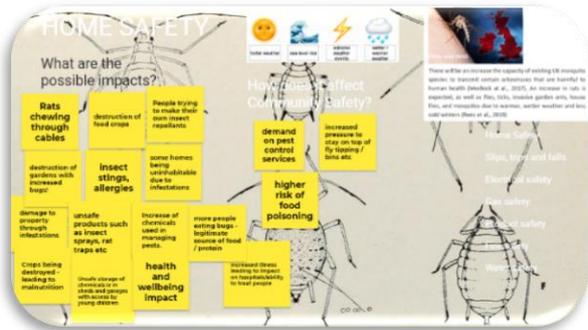
Erosion of Coastline



Impact on Home Safety

Damage to homes and coastal communities from erosion puts people at increased risk of **homelessness**. Coastal erosion presents danger to human safety as housing is put at greater risk of extreme flooding, particularly the properties more exposed to damage from **wind and tide**. Risk of flooding can result in homes becoming more **expensive to maintain** and protect against flooding, due to location. People may undertake their own repairs, putting **people** at greater risk of DIY accidents. Second homes and **holiday homes** in coastal areas may be more at risk of coastal flooding, as people stay there less often and more sporadically, and may be less aware of the risks in the local landscape as it changes. People may find it more difficult to sell their property, due to long-term, **irreversible damage** to their home. Negative economic impacts to the area could follow flooding and housing damage, with **less visitors** and tourists coming to the area. Segments of the community could be torn apart following devastation to homes, and this could result in an increased risk of **antisocial behaviour**. There is a risk of limited access to gas, water and electricity following extreme coastal flooding. Increased risk of power cuts may lead to more people using candles in the home, increasing **fire risk** as well as potential for **falls** in the home in the dark.

have a negative impact on health and wellbeing, and put additional **pressure on health services** to treat people. In addition, it could put additional **pressure on pest control services** and on councils / community safety teams to stay on top of fly-tipping and bins. There is also greater risk of more people getting ill from **eating bugs**. Insect protein is a legitimate source of protein, with more products starting to flood the market, including cricket crisps, insect pet food and insect protein powder. Perhaps people might start to attempt to catch, treat and eat bugs found in their home which could result in a host of potential **health risks**. Although an abstract concept, is a legitimate home safety concern.



Impact on Outdoor Safety

Those enjoying the outdoors may be subjected to increased problems from pests and INNS, such as **mosquitos and ticks** and the **disease** they transmit from bites. Possibility of new **virus transmission** would also be increased, for example - Zika virus. Any new viruses and diseases that spread could risk **pandemic** and mean vaccinations and safety measures that curb peoples' lives and freedoms. Changes to the ecosystem could **attract other predators**, such as snakes or birds, which would become more prolific which bring new associated dangers. An increase in rodents will bring disease and could **contaminate water supplies**. Community safety practitioners were particularly worried about the impact increased rodent populations would have on **bins, litter, hoarding and fly-tipping**, and how they might encourage infestations. Overall, it was felt that pests and INNS would increase **general stress, pressure on the NHS** and hit the **most vulnerable** most acutely.



Impact on Personal Safety

new conversations and encourage people to start considering the future; resources and operational constraints in the face of our changing climate. New community safety strategic documents should include climate change. Risk assessments should include the impacts listed throughout this document. To note, the new Scottish Fire and Rescue Service draft strategy includes climate change as a priority. We welcome this and suggest other organisations consider this too.

The next step for SCSN is to utilise the skills of an experienced graphic designer, to summarise the findings in a simple, easy to understand and engaging illustration, perhaps resulting in a poster or zine, digital or physical. We will be share this widely within our network, website and social media. We will also consider a future webinar on the same topic, whereby community safety professionals can collaboratively map solutions and adaptations, to help overcome the community safety challenges of the future.

In addition to this report, a 'Jam Pack' PDF file can be downloaded which includes all the jam boards (virtual post-it notes) from the workshop.

Thank you for your time reading this report, we hope you find it helpful.

The SCSN Team.

Feedback on the event

100% of respondents felt the topic was relevant.

75% of respondents rated the event overall as 4 or 5/5 stars.

60% of respondents rated the breakout sessions using jamboard as 4 or 5/5 stars.

83% of respondents would definitely or very likely attend another of our events.

The main 'takeaways' from the event were around:

- A wider understanding of the complexities of climate change including the variables and less obvious implications
- The effect of climate change on the most vulnerable
- The need to think about social care and health alongside community safety
- Working with communities to educate and prevent
- The need to build better networks and partnerships to adequately prepare
- The many cross-cutting areas and opportunities for collaboration
- Lack of meaningful awareness around climate change

Some comments:

"Structure was perfect - attended too many events where people simply wish to talk at you over a screen. This was much more balanced - good use of slides and message

facility in intro followed by jam boards and final discussion. Really relaxed and engaging. In this respect, best training I've done in a while!"

"Informative, interactive"

"Really well organised and facilitated with useful content. Like the Jam Board"

"Enabled us to reflect on our own work and communities - brought up issues I had never thought of before as being impacted by climate change"

There were some comments on more interaction between participants, more focus on actions and community input. We will take these on board.

We also had a twitter # for the day, with 10 tweets and 9 retweets about the session reaching 45,281 accounts.