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LGA Fire Conference – March 2020

“Drowning Out Drowning”

UK Water Risk and analysis with
supporting Case Studies



Global Perspective

The World Health Organisation (WHO) report of 2014 stated that: “drowning is a serious, neglected, global public health issue, claiming a shocking 372,000 lives each year”

Whilst the number of water fatalities in the UK is small compared to the Global issue, water still accounts for more deaths in UK than fires and cycling accidents on the roads

WHO made 10 recommendations to help prevent drowning and one of those was that countries should develop and implement a national water safety strategy



The United Kingdom

The United Kingdom, apart from being an island with extensive coastline (17,820km according to Ordnance Survey) also has significant bodies of inland water in rivers, lakes, reservoirs, canals etc.

The UK published its Drowning Prevention Strategy in 2016. Its overall stated aim is to reduce accidental drownings in the UK by 50% by 2026



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UK Overview

- There is not a single county or district in UK without some water risk (either natural or built)
- The National Water Safety Forum (NWSF) is a UK based coalition of public, private and third sector bodies that has an interest in reducing risk in water and wrote the UK Drowning Prevention Strategy, NFCC are a part of the forum.
- In 2010 the number of fatalities recorded as deaths in water in the UK (all causes) were 711 – in 2018 that figure was 585.



The Sector Position : Overview

Since 2014 NFCC have had an active work stream focused on Water Safety and Drowning Prevention, this is separate to Flooding and the technical water rescue groups, but there is active interface with prevention messaging.

The Devolved Administrations have different statutory duties for the Fire and Rescue Sector and as such it is just English services that don't have a specific statutory duty for water rescue and prevention, however the IRMP requires these services to be aware of the community risk and also the sector has in place national resilience assets to deal with flooding.

In reality most services do have some capability to both respond to inland water rescues and have some form of prevention activity or support the annual NFCC **#BeWaterAware** campaign.



The NWSF : Analysis

The NWSF hosts WAID - The Water Incident Database and this is populated by data from multiple sources and agencies and rigorously assured by cross checking data on fatalities with coroners reports. From this data an annual fatalities report is produced and within that analysis of high level demographics, behaviours and locations is done to facilitate intelligence for bespoke or targeted action

Whilst data exists for water rescues, they are harder to statistically verify, so whilst not published, they are assessed around 10 times higher than of verified fatalities



The Risks : Location, Behaviour, Education

More People + More Water = Higher casualties, therefore we also have to consider visitor numbers, not just the population of areas

Certain bodies of water are also inherently more risky for people using them, for either work or leisure purposes, because their condition varies (e.g. the sea and strength of tides or current patterns in certain locations) or in some instances because of the water within them (PH level, contamination etc.)...however analysis clearly shows that the largest risk in relation to water is the human factor - behaviour and lack of knowledge

Half of all fatal incidents (52%) occurred in just four of the 14 defined areas in the UK in 2016 – namely South East, South west, Wales and Scotland – that is however changing and we also see pockets of incidents in City centres – Bristol, Manchester, Brighton etc



The Analysis : Location, Behaviour, Education

Analysis of demography shows that males are far more likely to drown in fact 81% of fatal drowning casualties are male (accidental drowning by gender analysis WAID 2010-2013)

Analysis of intent shows that in almost half of all fatal incidents the person had no intention of entering the water

Analysis of swimming ability information demonstrates that 51% of UK children aged 7-11 can not swim 25m unaided

Analysis of activities demonstrates that the highest **risk** activity (assessment of accidents against participation numbers) is diving (sub aqua) however the highest **incidence** of drowning occurs in those running or walking by water



The Analysis : Location, Behaviour, Education

Analysis of fatalities shows a high number of casualties had consumed alcohol/ drugs prior to drowning and there is a correlation with time of day (late evenings/ early mornings)

There is an emerging correlation between the amount and quality of prevention, education and engineered solutions in areas and the reductions in the number of fatal drownings (case study)

Water associated activity is a growing leisure activity with significant wellbeing benefits for example Open water swimming participation is estimated to have increased by 400% in the last 3 years



The Drivers for action

- **Deaths:** annually around 600 people die in UK waters
- **Injuries:** Non fatal drowning can lead to major life changing injuries including catastrophic brain injury (oxygen starvation). For example around 6% of major trauma in children is due to non-fatal drowning (source UK trauma network)
- **Financial:** the costs of emergencies can be significant depending on which services are required, but with hospital admission the average costs per incident were estimated by the NAO as 1.4 million in the UK
- **Moral:** The consequences for families effected by drowning are significant, especially as many of the lives lost are young people



The Drivers for action

- **The Weather:**
 - Long hot spells always result in spikes for drowning as people head to the water to cool off.
 - Storms and high winds attract people to the coast to film the waves crashing over seafronts and rocks and sadly many people are swept in trying to get closer for a selfie
 - Heavy rain (unprecedented rainfall has become an issue in last 10 years) usually results in flash flooding creating risk to people, property and livestock
 - Harsher winters and extreme cold weather (Beast from the East) can produce thick ice on deep bodies of water or rivers and creates risks particularly for people and dog walkers that venture onto it
 - Water temperature – UK waters are generally cold (below 15degrees) and can cause physiological response of Cold Water Shock



NFCC : Delivery

As part of NWSF, NFCC has been able to lobby and achieve:-

1. Improvements to consistent signage at bodies of water
2. Improved data and intelligence: WAID and Home Office
3. Best practice sharing – Durham, York, Bath etc.
4. More consistency in campaigns focused on issues such as alcohol, Coldwater shock, education packages
5. Political advocacy – With a lead Government Dept. and minister for DP (Maritime)
6. The UK drowning prevention strategy
7. Press Interest and aligned campaigns with greater reach: Float to Live (RNLI), DDD (RLSS) etc.



Key Messages

1. Prevention is better than cure
2. Water risk needs to be part of every FRA IRMP risk assessment
3. Partnership and collaboration is vital to reducing harm
4. Data and intelligence is key to targeting action and protection measures
5. Understanding of legal obligations of Local authorities is important (see Inland water and coastal waters guidance)



Offer and Questions

The NWSF and NFCC practioners group can assist

Any Questions



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