



# Parliamentary and Scientific Committee



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## Is the UK Prepared to Protect the Most Vulnerable from Extreme Heat

UK temperatures have seen a dramatic increase since 2010, with summer 2023 and summer 2022 being the first and second hottest summers on record respectively. This evening, we heard from six expert speakers about the dramatic effect this could have on our health. Prof. Mike Tipton, Professor of Human and Applied Physiology, gave us a rundown of what we do and don't know about the effects of extreme heat on the human body. Dr Cat Pinho-Gomes from Institute of Health informatics at UCL discussed how temperature increases and demographic trends make the issue of extreme heat an urgent health concern in the UK. Carl Petrokofsky, FFPH, discussed what actions will be needed to address the risks posed by extreme heat. Prof. Elizabeth Robinson and Dr Candice Howarth, Director of and Head of Local Climate Action respectively at the Grantham Research Institute on Climate Change at LSE, discussed how policymakers can better respond to the risks posed by extreme heat. Lastly, Baroness Dr Fiona Twycross showed us that the consequences of extreme heat are already being witnessed, further emphasising the need to address this threat. The engaging Q&A session at the end of this session mostly focused on the effects of increases in the global average temperature on our society.

Prof Tipton made it very clear that extreme heat is a very serious threat to our health. We already know that extreme heat can affect us all, with the effects ranging from heat cramps to more serious heat strokes and potentially death. We know certain groups are more at risk, including the very young and old, those who are pregnant, and those with other comorbidities. However, there's a lot we don't know yet. Including the long-term effects on the metabolic or cardiovascular system, nor the full effect that extreme heat on cognitive function.

What we do know is that extreme heat is a pressing issue for the UK. Baroness Dr Twycross

explained how there had been a 10-fold increase in extreme heat related issues witnessed by the ambulance service. Extreme heat already leads to 2,000 access deaths annually in the UK, and without substantial mitigation this will increase as we see increased warming. Dr Pinho-Gomes explained how UK's aging population increases the threat, with the majority of the population being older and more vulnerable to the effects of extreme heat by the 2040s.

Despite the scale of the threat, we do know of ways to mitigate against the effects of extreme heat. Mr Petrokofsky explained how Extreme Events and Health Protection team at the Centre for Climate and Health Security has created the Adverse Weather and Health Plan which gives a range of mitigation and prevention tactics to reduce the harm caused by extreme heat. These range from more sophisticated heat health alerts, telling the public who is at most risk and what they can do to reduce harm to health on an individual level. However, for mitigating actions to work policymakers need to be informed and ambitious. Prof. Robinson and Dr Howarth how policymakers need to work with interdisciplinary institutes to explore the best options for informing and empowering the public to take steps to reduce harm to health caused by extreme heat.

All of our speakers these evening emphasised that the UK is currently not prepared for this threat and that the harms to human health will increase as populations get older and temperatures increase. However, we do know what can be done to reduce harm to health on an individual and population level, but we need ambitious policies in order to implement these actions.

*Alfie Hoar*

*P&SC Discussion Meeting, 'Is the UK Prepared to Protect the Most Vulnerable from Extreme Heat' 20th November 2023*