Grantham Research Institute on Climate Change and the Environment

PCAN PLACE-BASED CLIMATE ACTION NETWORK

# The 2022 heatwaves: England's response and future preparedness for heat risk

## Annex: Review of current heatwave policy and practice across sectors and themes

*Accompanies the policy brief available at:*
*www.lse.ac.uk/granthaminstitute/publications*

LSE THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

In association with BritishRedCross

## Review of current heatwave policy and practice across sectors and themes

| Sector/theme | Current weakness in policy and practice | Suggested improvements |
|---|---|---|
| Buildings | • Part O of the Building Regulations in England on overheating does not include a maximum temperature threshold for working. Further regulation is required for existing buildings, not only new builds, and in particular homes, health and care facilities and prisons.<br>• The National Building Design Code and Overheating Mitigation for buildings (DLUHC, 2021) is guidance only.<br>• The Heat and Buildings Strategy (BEIS, 2021) focuses on net zero and decarbonisation and only briefly mentions future-proofing for overheating and air quality risks. | • Ensure retrofitting buildings is seen as part of heat-related adaptation, considering decarbonisation, overheating and air quality holistically, and including both overheating and cooling measures.<br>• Buildings policies and regulations should be updated to ensure urban shading, cooling and passive cooling measures are sufficiently considered as a feature of all new developments.<br>• Consider strengthening design codes and practical measures by including checklists for quality assurance, and making guidance compulsory. |
| Health | • First responders feel under-prepared due to a lack of capacity (staffing and knowledge) and specific local or regional policies.<br>• Lack of awareness that 18°C is the optimum temperature for human health, where mortality is at the minimum (WHO, 2018), and that temperatures above or below this start to have a negative effect on the population. | • Include adaptation planning in Green Plans and incorporate all impacts of heat on health into health policy (e.g. impaired sleep and how this may impact on work, ripple effects and co-dependencies of heatwaves, droughts and water shortages, and the relationship between COVID-19 and severe heat).<br>• Develop local and regional extreme heat health plans.<br>• More research on the above where gaps in knowledge exist, and to better understand the costs and benefits of adaptation actions, particularly the co-benefits for the health system. |
| Vulnerable or at-risk groups | • Insufficient understanding of who is vulnerable to extreme heat and why.<br>• A significant number of vulnerable groups do not identify themselves as vulnerable, and are therefore less likely to act in the interests of their own health (British Red Cross, 2021).<br>• Little awareness within local and national government of existing mapping tools to assess vulnerability to climate change at a neighbourhood scale.[1] | • Amend local and central government guidance on at-risk groups to heat to better incorporate those with different vulnerabilities.<br>• Ensure that policies consider a wide range of vulnerable people, including rough sleepers, people with disabilities, people with socio-economic disadvantages, young people, people who work outdoors, single households and those living in top-floor flats.<br>• Acknowledge cross-cutting vulnerabilities (e.g. homeless people with physical or mental ill health).<br>• Increase awareness among governments and local authorities about available vulnerability mapping tools.<br>• Provide indoor and outdoor cool places and facilities across the UK that all vulnerable people can easily access during heat events. |

[1] However, a webtool for public service providers by Climate Just is being updated to help them to identify vulnerabilities to heat, flooding and fuel poverty.

| Sector/theme | Current weakness in policy and practice | Suggested improvements |
|---|---|---|
| Preparedness | • Although excess seasonal deaths start to occur at around 25°C, the temperature thresholds in the health heatwave alert system are higher than this.<br>• Limited understanding in the education sector of how overheating affects education services.<br>• Limited preparedness for the risk of 'squally' winds during heatwaves and their impact on emergency responses to wildfires. | • Local governments to set a 'safeguarding response' temperature for heat, i.e. a minimum temperature threshold above which responses kick in.<br>• Invest in innovation for safe, sustainable, solutions for early detection of heat events.<br>• Implement plans to address potential compounding and cascading risks, which may act as multiple stressors alongside heat events (e.g. droughts, food security, new and emerging diseases), and plan for different scenarios.<br>• Learn from cities that are more experienced in managing extreme heat risk. |
| Climate adaptation | • Siloed approach to climate mitigation and adaptation<br>• Missed opportunities to integrate measures to adapt to extreme heat in climate mitigation plans and actions.<br>• Huge variability across the UK in local authorities' ability to produce adaptation plans due their size and staffing.<br>• National Adaptation Programme for England mentions heat risk though actions focus on overheating buildings. | • Improve understanding of the interconnectedness between climate mitigation and adaptation agendas, recognising cross-cutting themes, impacts and actions.<br>• Ensure updates to plans relating to climate change mitigation, adaptation and the environment by local authorities, national government, first responders, communities etc. include different sectors and agendas.<br>• Support local authorities to produce adaptation plans, especially those with limited resources and capabilities.<br>• Systematically collect data on how cities are adapting to the impacts of extreme weather and climate change and whether efforts to reduce risks and increase resilience are working. |
| Communication | • Lack of public awareness of the impact of extreme heat as well as exacerbated risks and ways of keeping safe.<br>• Lack of overarching narrative regarding vulnerability to heat, risks of exposure and the benefits of adaptation. | • Improve public messaging and communication, targeting vulnerable groups according to their needs.<br>• Ensure information is translated for those whose first language is not English.<br>• Learn from communications approaches of other countries with greater knowledge and experience in public messaging on heat.<br>• Research is needed to find out which heat risk messages are most effective (McLoughlin et al., 2023). |