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Extreme heat in the UK and supporting everyday adaptation to future heatwaves

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Heatwaves are projected to increase, with summer temperatures predicted to be 5 degrees hotter by 2070. The Government and governmental agencies need to develop better guidance on extreme heat to support the public, especially low-income groups.

Summary

- The summer 2022 UK heatwave saw the highest heat mortality on record with 2,985 excess deaths.
- In years to come, summers will get hotter, and heatwaves are projected to increase.
- The public already engage in 'everyday adaptation' to extreme heat, but their capacity to do so is highly unequal.
- The Government and agencies need to develop more effective public guidance on extreme heat to encourage and support a more expansive range of adaptive practices.

The effects of heatwaves

In 2022, the highest recorded temperature in England reached 40.3°C, and the highest number of days on which a Heat-Health Alert (HHA) was issued since the alerting system was introduced in 2004. Summer 2022 had the highest heat mortality on record with 2,985 excess deaths, mainly observed in the 45 to 65 years group and 65 years and over groups.

The policy landscape

Despite the government stating that public health risks from overheating is a key priority, extreme heat remains an 'invisible risk'. The UK's National Adaptation Plan 2023 does not take sufficient steps to empower the public to make decisions to reduce their exposure to heat risks and so far we understand very little about how the general public experience and adapt to extreme heat during their day to day lives. It is essential to understand how people experience and adapt to extreme heat. This can inform locally appropriate policies that target the most vulnerable and improve people's adaptive capacity to reduce heat mortality.

Everyday adaptation

Research from Summer 2023 focused on how members of the general public living in highly deprived areas of Manchester adapted to extreme heat. The findings of this research found that people do not perceive heatwaves as a key issue in the UK, and saw high temperatures of 2022 and 2019 as exceptional, rather than indicative of future trends. The public view extreme heat as a problem in other countries, not in the UK. Older people and those who cared for children of older people were more likely to view extreme heat as troubling.

Most people understood older people and homeless people to be the most vulnerable to extreme heat. Other groups, such as tenants, lower-income people, and disabled people are also vulnerable to extreme heat and have limited capacity and resources to engage in adaptive practices. No participants in this study were aware of public guidelines on how to adapt to extreme heat. This research has found inadequacies with the government's public health information, and many found this information unengaging and difficult to access.

Participants used their "common sense" and engaged in 'simple and mundane' strategies to adjust their daily practices and schedules and routines to avoid exposure to extreme heat. Some adaptations which participants engaged in were: drinking more water, wearing cooler clothes, closing the curtains during daylight and opening windows at night, driving rather than walking or using public transport, eating lighter foods, buying an electric fan, walking

their dogs earlier in the day, staying in the shade, taking cool showers, keeping their feet in a tub of cold water, and checking in on friends and relatives who may be more vulnerable.

Restrictions to adaptation

Many participants only engaged in a small number of strategies, because they were unaware of other practices or lacked the time and income to enact them. Participants reported they could not afford to buy electric fans, and lighter salad foods were too expensive. Others could not afford a car, or were reluctant to take extra showers due to concerns about their water bills. Some tenants in rented accommodation could not open their windows due to faults or had broken curtains. Perceptions of high crime prevented people from sleeping with their windows open. Many participants complained that there was a lack of shade in public spaces (such as streets, bus stops and parks) and that more potable public water taps were needed.

Policy recommendations

- **The Government should work with partners to develop public information about extreme heat.** These partners should include the UK Health Security Agency and the Department for Environment, Food and Rural Affairs and public health forums across the UK. Public guidelines should be accessible, engaging and fun, following the lead of the successful Australian sun protection campaigns. These campaigns would allow people to understand different levels of vulnerability to extreme heat, and the important role of social networks during heatwaves. The guidelines must increase people's understanding of the range of adaptive practices available to them.

- Policies must support the adaptive practices people already engage in, while recognising that low-income people are often unable to engage in certain heat adaptation practices due to cost. Solutions to support adaptive practices must work across resource sectors (water, energy, climate, and environment) and health sectors.

- Further policy recommendations to support the general public during heat waves should include more public water taps; investment in creating shade in public spaces and facilities and regulations to ensure landlords prepare their properties for extreme heat events.

Key academics

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