

July 2026

Research briefing

Climate change's heat tax on the UK's labour force and economy

During and immediately after the intense heatwave that affected the UK in June 2026 we carried out a survey of workers to find out how the heat affected their work, then calculated the cost to the economy.

We estimate this single heatwave could have cost the UK more than £1 billion in lost output.

This heatwave struck in the last two weeks of June, causing England to record its warmest June since records began in 1884, and daily maximum temperatures to reach the mid to high thirties degrees Celsius.

We surveyed a nationally-representative sample of 1,950 adults¹ across the UK about how they perceived impacts of the heatwave on:

- Working hours; effort while working; health; ability to sleep; any changes to how they got to work or their place of work; their working environment.

Through a rapid analysis of the findings, we were able to estimate the economic cost, in terms of lost output, imposed by the heatwave, derived from workers' responses about adjustments they made to their working hours. The impact of £1 billion-plus in lost output is on top of the negative impacts on workers' health and increased pressure on health services.

First, we calculated the extent to which those who engaged in at least some paid work during the heatwave reduced the number of hours they worked due to the weather (rather than for other reasons such as going on a planned holiday). Out of the full sample of 1,950, 1,642 carried out paid work during the surveyed period.

- The average reported reduction in hours worked across the week was 0.47 hours.
- This would suggest approximately 16 million lost hours in a working population of 34.4 million – given that the sample is nationally representative.

Authors

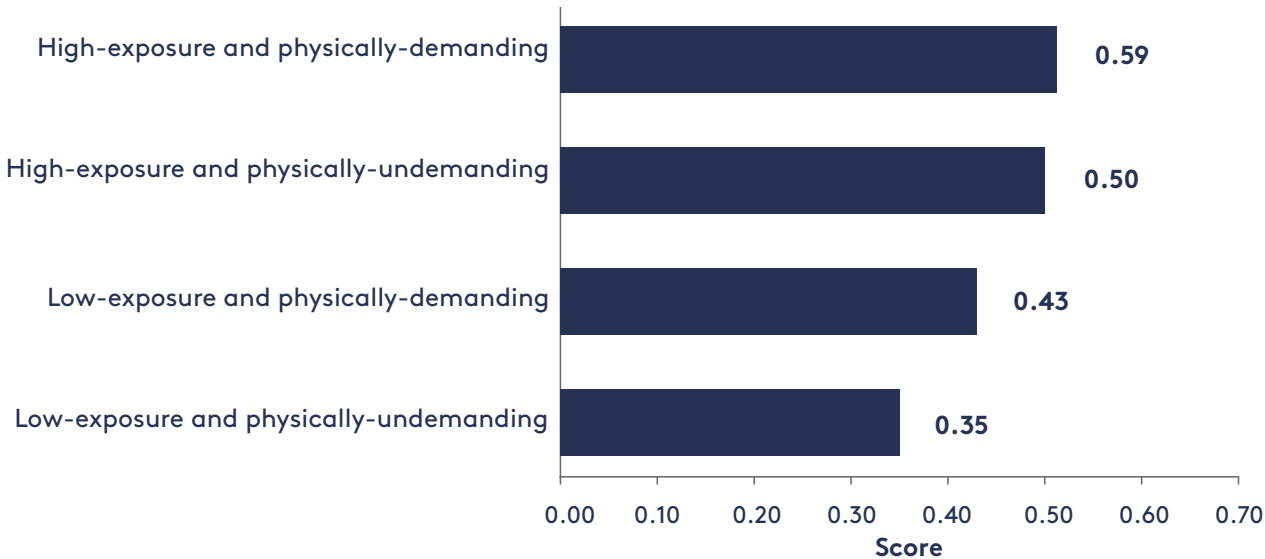
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1. Adults categorised by the Labour Force Survey as "eligible for the UK labour force". We built on similar surveys that we conducted in 2024 and 2025 (Robinson et al., 2025), administered by Qualtrics.

- These lost work hours are equivalent to a cost of £0.77 billion to the economy, assuming whole-economy output (gross value added) to be £48 per hour worked (ONS, 2023).
- Those working in jobs more highly exposed to heat and that are physically demanding, in sectors such as construction and agriculture, reduced their hours by more than those working in low-exposure and physically undemanding jobs such as academia (see Figure 1).
- About 3.6% of respondents, equivalent to approximately 1.25 million workers in the population as a whole, told us that they did not work at all that week because of the heat. This is equivalent to an additional 8 million lost hours, at an estimated cost to the economy of £0.38 billion.

Figure 1. Average reported reduction in working hours during the June 2026 heatwave (1,459 nationally-representative respondents)



Combined, the reduced hours and the full days not worked come to about 24 million lost hours, or approximately £1.15 billion of lost output in a single severe heatwave week.

These numbers could be an underestimate of the actual impact, partly because we also need to take into account the effect of *reduced effort on productivity and output*. As Figure 2 shows, one-third of our respondents reported their effort dropped due to the heat. To measure the economic impact of this reduction in effort requires a different data collection approach. Again, perhaps unsurprisingly, those working in high-exposure and physically-demanding jobs were more likely than others to report that they reduced their effort while at work.

To the extent that workers compensated for this reduction in hours and lower effort outside of the heatwave, these numbers could potentially overestimate that impact. However, most evidence suggests that any adjustments tend to be made within the same day or week rather than across long time horizons.²

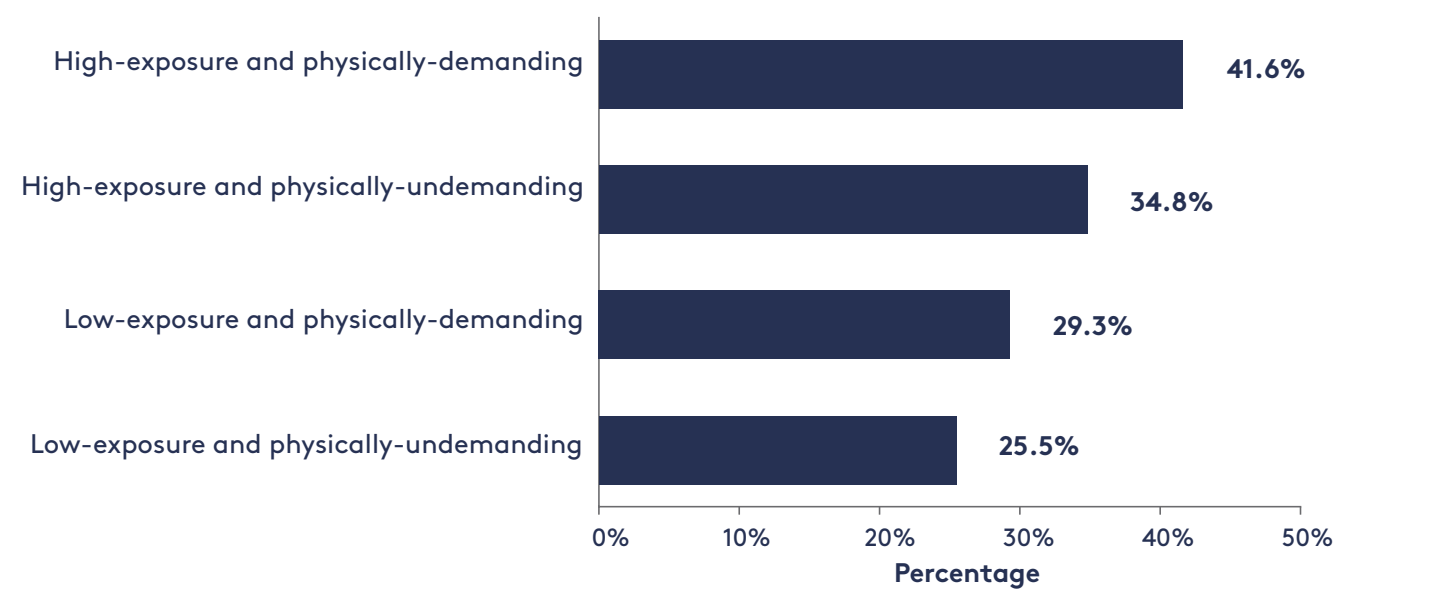
Figure source: Authors’ survey, June 2026; respondents who engaged in paid work during the week of 22 June 2026.

Notes: High-exposure and physically-demanding job = 15% of sample; High-exposure and physically-undemanding job = 9%; Low-exposure and physically-demanding job = 34%; Low-exposure and physically-undemanding job = 42%.

This figure excludes 183 respondents (around 11% of the 1,642) who reported reducing their working hours but whose industry could not be categorised, who reported reducing their hours by 0.77 hours on average.

2. See Graff Zivin J and Neidell M (2014) *Temperature and the allocation of time: implications for climate change*. *Journal of Labor Economics*, 32(1): 1-26.

Figure 2. Share of workers who reported reduced effort during the June 2026 heatwave (1,459 nationally-representative respondents)



Our calculation of just over £1 billion in economic cost to the country is comparable with other estimates that use different methodological approaches. For example, the Office for National Statistics has estimated that hot days, defined as those reaching over 28°C, cost the UK economy an average of £1.2 billion per year in lost productivity per year between 1998 and 2021, with the cost of reduced productivity in 2020 alone estimated at £5.3 billion (ONS, 2024). However, these figures relate to earlier years; the past five years have been the hottest on record. A study by Emediegwu et al. (2025) suggests that a 1°C increase in summer temperatures reduces UK economic growth by about 2.4%.

Figure source: Authors’ survey, June 2026; respondents who engaged in paid work during the week of 22 June 2026, and whose industry could be categorised.

Our survey also highlighted health impacts, though our calculations do not reflect the cost the heatwave imposed on worker health, nor on those individual workers who are paid by the hour or piece rates and who would have lost income if they reduced their hours to protect their health. Our survey found that:

- 87% of workers reported at least one health-related impact during the week of 22 June 2026, ranging from disrupted sleep and being more tired at work through to a small number of workers reporting more extreme symptoms including dizziness or fainting and a faster heartbeat (see Figure 3).
- 5% of respondents said they sought medical attention.
- Around 3% told us they reported an accident or injury at work during that week, and around two-thirds of them felt it was linked to the weather.
- Women, those aged under 35 and people with existing health conditions were the groups most likely to report that their health was harmed.

Overall, our results point to a country that remains insufficiently adapted to the changing climate, with implications for both workers’ health and the economy.

Figure 3. Workers’ self-reported health effects attributed as being possibly due to the heat during the June 2026 heatwave (1,642 nationally-representative respondents)

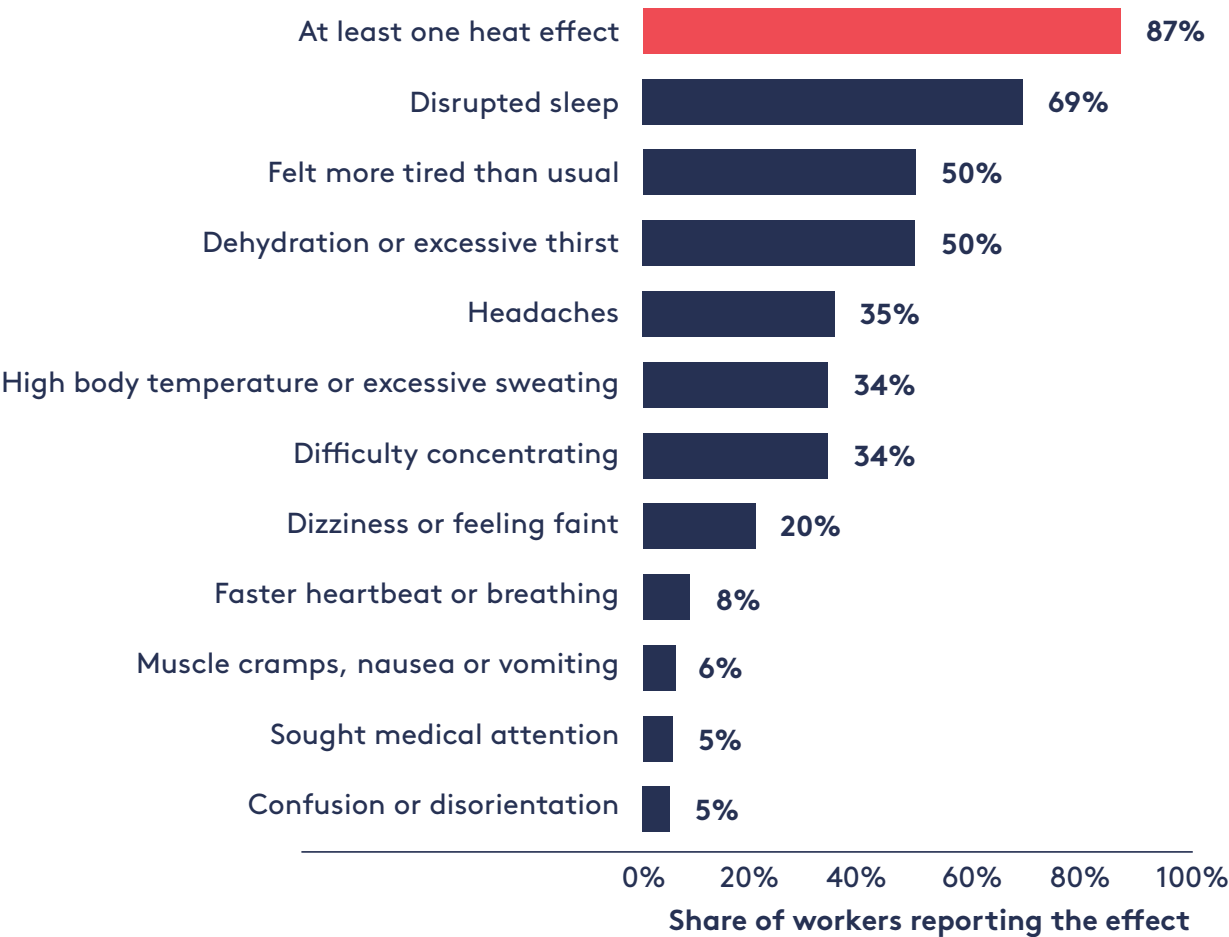


Figure source: Authors’ survey, June 2026; respondents who engaged in paid work during the week of 22 June 2026.

Authors’ note on research and review

This briefing is based on a recent survey. Our findings offer a rapid assessment to the question ‘What was the economic cost of the recent heatwave in the UK?’ The work has not yet been peer-reviewed. We are grateful to our colleague Gregor Singer for providing internal review. The study has undergone ethics review in accordance with the LSE Research Ethics Policy and Procedure. The LSE Research Privacy Policy can be found [here](#). The authors declare that no generative AI or AI-assisted tools were used in the research, analysis or preparation of this briefing. Edited by Georgina Kyriacou. Any errors or omissions remain those of the authors.

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