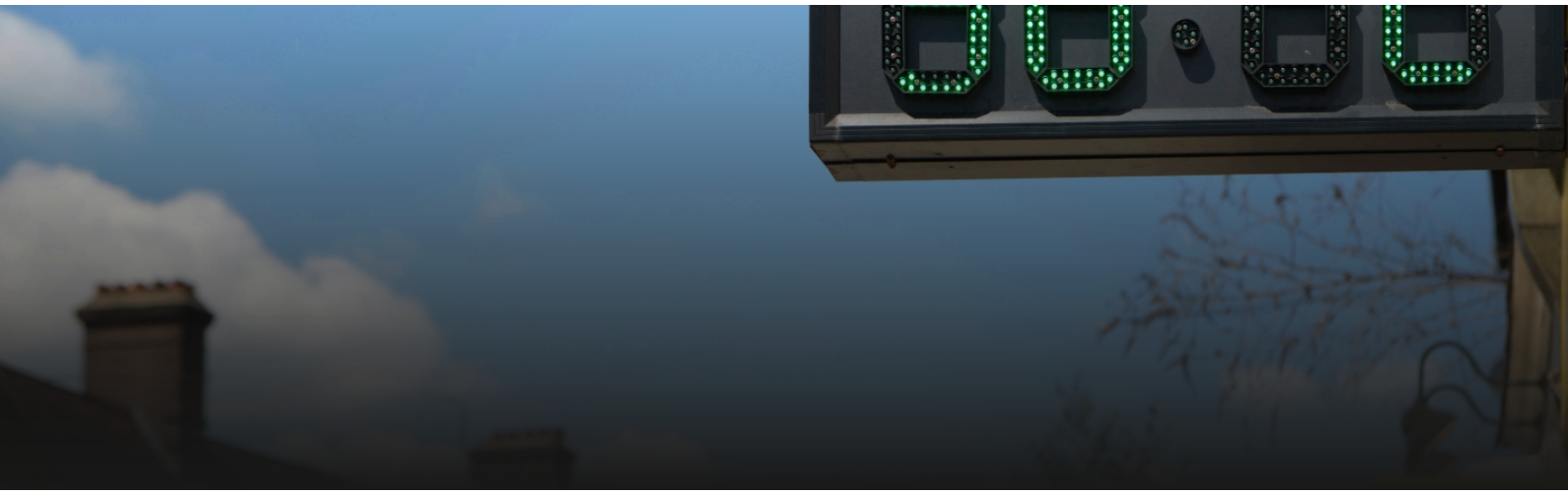

Elizabeth Robinson Shouro Dasgupta September 2nd, 2025

Workers' health and the economy are suffering due to climate change

Until recently, life in the UK had to adapt to a climate in which cold weather is a risk to life, health, and productivity. But that has started to change. ***Elizabeth JZ Robinson*** *and* ***Shouro Dasgupta*** *document the effects of hot weather on the health of workers and the economy at large. The country needs to adapt to this new climate reality, while continuing to fight further climate change.*

The UK, a cluster of islands in the North Atlantic, has an infrastructure and culture suited to a not too warm, though perhaps too damp, climate. But the planet is warming, and the UK is clearly a climatically very different place from when much of the country's infrastructure was built, and with summers that may feel ever more Mediterranean. As we write this blog, the UK is experiencing its third heatwave of the year, with temperatures reaching well over 30°C in parts of the country. Three years ago the country experienced temperatures of over 40°C for the first time on record.

When we think about weather extremes in the UK, and protecting the population, we may have tended to be particularly concerned with the cold, as historically the UK has recorded more deaths due to cold than to heat. But increasingly we need to be concerned about heat, and especially so for the UK's labour force.

Working in the heat, with no protection

Unlike countries that are used to high temperatures, the UK isn't set up for the new climate reality. Many of us do not have fans in our homes, let alone air conditioning, consequently during heatwaves our sleep can be disrupted if our homes do not cool down over night. Then to get to work we may be walking in the heat to take public transport, and if we live in London we may be taking the underground, where on several lines the temperatures on the platforms are greater than

the outdoor ambient temperatures, and the train carriages even worse. So before we even get to work we may be experiencing the first signs of heat stress, and already be more susceptible to workplace accidents due to cognitive abilities being affected by the heat.

Recently collected evidence suggests that UK workers do feel that their health is being harmed by heat, and many are reducing their working hours and effort to help deal with the heat.

Some workers have access to air conditioning, but many do not. Others may be working outdoors, such as in construction or agriculture, high exposure sectors. Still others may wake up in the morning, part of the gig economy, and have to choose between protecting their health or protecting their income, and end up compromising both.

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We surveyed over 2,000 workers just after a period of hot weather in the UK, to get a better understanding of how heat is harming their health, the extent to which workers can adapt to heat in the workplace, the extent to which they feel their labour productivity is being affected, and whether employers are making sufficient adjustments and investments in adaptation. The health effects identified by respondents were predominantly symptoms of heat stroke or heat exhaustion, such as headaches or dizziness.

Our findings suggest a clear link between higher temperatures and workers reducing their hours worked and their effort. This is consistent with other research that finds that compared to 1986-2005 average, increased temperatures resulted in 1.9 per cent (29.4 hours/worker/year) fewer working hours in high exposure sectors during 2016-2019.

Early warning systems do seem to work. Workers who reported recalling getting a heat alert had a lower probability of reducing their working hours and a lower probability of experiencing heat related health effects. A possible explanation is that alerts give workers time to make adjustments to their work practices, so that they can protect their health and are able to continue to work more effectively. However, not all workers will be able act on these warnings.

Contract type also matters. We found that those paid by the hour, paid on commission, and paid piece-rate, are less likely to undertake adaptations and more likely to reduce their hours worked, compared with those who are paid a salary, suggesting that these workers may be less supported by their employers and less empowered, and that job security may play a significant role in workers being able to be flexible during high heat days.

Hot weather is bad for the economy

Not taking the heat seriously doesn't just affect workers' health, it affects the labour force and therefore company profits and economic growth.

There is plenty that still can and needs to be done to better protect worker health and reap the economic benefits of a well-adjusted economy.

In the short term, there are plenty of fairly straight forward adaptations that can help employees cope better with the heat, which can protect both health and profits. These include introducing flexible shifts, or more broadly allowing workers to choose when during the day they work, taking more rests, and drinking more fluids. But workers need to be empowered to make these adjustments.

Employers may install air conditioning; modify work schedules; allow flexible working; moving staff away from the source of heat; and temporarily relaxing workplace dress codes; or take more extreme measures such as moving locations.

> *In the longer term, the UK almost certainly needs a "culture of heat".*

Protecting those working in the gig economy, who typically lack traditional workplace protections, is particularly tricky, and likely requires greater local and national government interventions. Possible approaches could include ensuring these workers have access to shade and hydration in public spaces, explicit integration into urban heat action plans, and more formal labour protections.

In the longer term, the UK almost certainly needs a "culture of heat". This may include new norms integrating heat protection for workers, empowering workers to protect themselves, and regulations

such as sector-specific temperature thresholds. Unlike many European countries, the UK does not have a statutory maximum working temperature, though this is increasingly being discussed.

Insufficient evidence has been paid to the economics of heat adaptation in the workplace including to what extent both worker health and employer profits could be enhanced through better adaptation. That is, there could be economic co-benefits from protecting worker health. Alternatively, if there are health-economic trade-offs, how explicit government actions can protect workers and minimise any such trade-offs.

Finally, countries cannot adapt their way out of climate change. There are limits to adaptation, and for some workers in some countries, these limits may already have been reached. Therefore, most important is still to keep fossil fuels in the ground and for the UK to show leadership with respect to accelerating the transition to net zero. In the UK this is where the economic growth opportunities lie. The CBI reported that last year the green economy grew at 9 per cent whole the rest of the economy grew at 1 per cent. But these growth opportunities can only be fully embraced if the workforce is able to work effectively in this changing climate and without increasing harm to their health.

Image credit: DRG Photography on Shutterstock

About the author

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Shouro Dasgupta

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