

Heatwaves and Women

Why rising heat in the UK
is a **feminist issue**

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Friends of
the Earth



Heatwaves and Women

Feminist Climate Justice

7 October 2026

This paper is aimed at UK Government departments responsible for preparing for and responding to extreme heat. It is intended for: DEFRA, leading the development of the next National Adaptation Programme (NAP4); the Department of Health and Social Care, responsible for heat-health guidance and the Adverse Weather and Health Plan; and the Ministry of Housing, Communities and Local Government, responsible for housing, planning and the built environment.

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Foreword

Professor Emma Howard Boyd CBE
Chair, National Heat Risk Commission
Co-Chair, HERA



This was a summer of record-breaking heat, fire and drought. By early August, the UK had experienced its fifth heatwave, placing significant pressure on public services, infrastructure and food production, while disproportionately affecting those least able to cope. Extreme heat is a growing public health and economic risk, and a critical test of our resilience.

But resilience is not evenly distributed. Inequality shapes who is most exposed, who can cope and who pays the greatest price. Our homes, workplaces, income, health and caring responsibilities all shape our exposure to heat. For women, these pressures intersect with gender-specific health risks and inequalities in housing, employment, income, care, safety and political power. Understanding these differences is essential if we are to prepare properly for a hotter future.

The National Heat Risk Commission has highlighted the need for a coordinated national response to extreme heat, recognising that rising temperatures pose wide-ranging risks to health, livelihoods, public services and the economy. But resilience cannot be about infrastructure alone. It must be about people - who is protected, whose experiences inform our responses, and who risks being left behind.

For decades, Wen (Women's Environmental Network) has made the case that environmental harm, gender inequality, health injustice and economic marginalisation are deeply interconnected. My work as Co-Chair of HERA, which focuses on protecting the health, income and dignity of women on the frontlines of extreme heat, has reinforced the importance of putting women's lived experience at the heart of our response. This publication brings organisations and academics together around the evidence and a shared call for change.



This summer has shown that extreme heat is not a distant risk. It is happening now, affecting people, businesses, public services and the places where we live and work.

Foreword



Those most affected should not be seen as vulnerable populations – their knowledge, leadership and lived experience should help shape the response.

It comes at a critical moment. This summer has shown that extreme heat is not a distant risk. It is happening now, affecting people, businesses, public services and the places where we live and work. As local heat and resilience plans and the Government's National Adaptation Programme develop, the choices being made now will determine how well we are protected as temperatures rise.

Resilience is not automatically equitable. If gender, race, disability, income and caring responsibilities are not built into climate planning, we risk reproducing – and deepening – existing inequalities. We have the evidence to understand these risks. The challenge now is to make sure that evidence is translated into action – changing how we plan, invest and prepare.

We need a feminist approach to heat and climate resilience, rooted in gender, disability and social justice. Those most affected should not be seen as vulnerable populations – their knowledge, leadership and lived experience should help shape the response. As Natasha Walter writes in *Feminism for a World on Fire*, “women can only flourish on a flourishing planet”. The same principle should inform how we think about resilience: protecting people and protecting the places and systems on which we depend cannot be separated.

This briefing is both evidence and a challenge: to move from recognising the risks to acting on them, and to make sure that as we prepare for a hotter climate, we build a healthier, fairer and more resilient society in the process.

Professor Emma Howard Boyd CBE
Chair, National Heat Risk Commission
Co-Chair, HERA



Executive Summary

The summer of 2026 was provisionally the hottest on record for the UK,^[1] with back-to-back heatwaves, wildfires, exceptionally dry conditions and widespread drought. Everyone in the UK experienced this heat, but the most harmful impacts were not experienced equally.

Time and again, evidence shows that gender shapes people's experiences of extreme heat. Across the world, it has often been documented that women face disproportionate impacts, that at times of food scarcity, women and girls go hungry more than men and boys, and that gender-based violence rises with the rising heat. These deep inequalities are visible in the impacts of heatwaves in the UK, too. Where data is available we see evidence that women bear a heavy burden of the harms created by extreme heat.

The disproportionate impacts can relate to biophysiological factors. Pregnant women are particularly affected by heat, and menopause can affect temperature regulation, and hot flushes can make extreme heat harder to tolerate. Women live longer than men, so they are over-represented in older populations, who face greater health risks in heatwaves. Women are more likely to live with disabilities and chronic illnesses, which can also increase vulnerability to extreme heat.



The impacts of heat are always about our environment as well as our bodies. The risks associated with heat are never a result of biophysiology alone, but also of exposure.

However, the impacts of heat are always about our environment as well as our bodies. The risks associated with heat are never a result of biophysiology alone, but also of exposure.

Women are more likely to live in poverty, and people on low incomes can face more exposure to extreme heat and have fewer resources to adapt. Poor quality and overcrowded housing can be difficult to keep cool during heatwaves. Women are also more likely to work in certain sectors, such as health, social care and education, where workers can face significant heat exposure. These and other structural inequalities can expose women, especially racialised women, to extreme heat, leaving them at a higher risk of mental and physical health harms.

The economic consequences are substantial too. The June 2026 heatwave alone is estimated to have cost the UK economy over £1 billion in lost output,^[2] while disrupted sleep during heatwaves is estimated to cost the UK economy £60 billion a year.^[3] Those who experience the highest impacts are the least able to absorb them.

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In this paper, we therefore take an intersectional feminist approach to heat, because this reflects the reality on the ground. Intersectional feminism recognises that gender, race, class, disability, age and other dimensions of identity and social inequality interact to shape people's experiences and exposure to risk, rather than operating in isolation. Women are not a single, uniform group, and all women do not experience heat in the same way. Alongside patriarchy and misogyny, other systems of oppression shape women's experiences of heat, meaning that women experiencing poverty, racialised women, disabled women and refugee and migrant women face particularly acute risks from rising temperatures.

It is vital to recognise that women are not a separate group alongside disabled people, older people and low-income communities. Women are present across all of these communities, and experiences of inequality often overlap and compound one another. An intersectional feminist lens therefore goes beyond seeing gender as one variable among many, but rather uses women's experiences as a lens for understanding the UK's growing heat risk across the board – and as a way of shaping a fairer response.

This paper also sets out what an intersectional feminist approach to heat adaptation could look like. This includes measures addressing particular risks experienced by women, including cooling in maternity settings. But more widely, we recommend urgent measures to protect all those most at risk from rising temperatures, including maximum working temperatures, a national retrofit programme and stronger standards for new housing, alongside expansion of tree cover and green spaces.

Adaptation must go hand in hand with mitigation. The risks from extreme heat will continue to grow unless we tackle the root causes of the climate emergency, particularly our dependence on fossil fuels.

A feminist future is one in which we care for both people and the planet, and all living beings can thrive. There is still time to build this future.



About this Joint Publication

This paper seeks to give a comprehensive overview of the ways in which women are disproportionately impacted by heatwaves and extreme heat.

Each of the contributing organisations approaches the impact of extreme heat through a slightly different lens. Wen brings an intersectional feminist approach, exploring the impact of the climate crisis and systemic inequality on women in particular, and working to ensure women are part of shaping the solutions; Friends of the Earth has extensive expertise in the mapping of heat exposure and a justice-based approach to adaptation; the Birth Companions Institute brings expertise on pregnancy, birth and the postnatal period. Each organisation approaches extreme heat from a different angle, but all recognise the need for urgent action on this increasingly pressing issue.

Key Recommendations

- 1. Make homes cooler**
- 2. Make green and blue space essential cooling infrastructure**
- 3. Protect workers from extreme heat**
- 4. Protect health through social care**
- 5. Put community power at the heart of adaptation**
- 6. Ensure heat alerts and emergency support reach those most at risk**
- 7. Address wider climate impacts of extreme heat**
- 8. Protect pregnant women and babies**

We use the word 'women' throughout this paper, but the co-authors view issues from a gender and intersectional perspective and are inclusive of gender non-binary, trans and gender non-conforming people.

Throughout this paper we use the term 'racialised and marginalised communities' to reflect that racial inequality is produced by structural and historical forces, not by race itself. We use terms such as 'people on low incomes', 'poverty' and 'financial insecurity' to describe the structural economic inequalities that shape people's exposure to heat and ability to adapt. We recognise that class and economic disadvantage are produced by systemic forces, not individual circumstance.

Introduction

Rising Heat in the UK

This paper is published at the end of what is provisionally the hottest summer on record,^[4] and yet we may look back at this summer as one of the more bearable ones. By 2050, summers like this one could very well become increasingly common.

Heatwaves are becoming more frequent and more intense. All of the UK's warmest years on record have occurred since 2002.^[5] This year saw a record-breaking May and June, following the previous hottest summer on record (2025) and only four years after UK temperatures exceeded 40°C for the first time. This is not a series of anomalies, but part of a long-term trend of rising temperatures driven by the burning of fossil fuels, agriculture and land use change.^[6]



Source: 2022: www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2022/red-extreme-heat-warning-ud 2026 www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2026/summer-2026-provisionally-hottest-on-record-for-the-uk

This is not unique to the UK: globally, exposure to extreme heat is increasing.^[7] Global temperatures are now around 1.4°C above pre-industrial times. In the UK, temperatures are 20 times more likely to exceed 40°C than in the 1960s.^[8] Without action to cut greenhouse gas emissions to net zero, global warming will continue towards 1.5°C by 2030 and 2°C by 2050.^[9] For the UK, this means more frequent and intense heatwaves, with temperatures above 40°C becoming increasingly likely and potentially reaching 45°C by 2056.^[10]

Heatwaves bring impacts well beyond high temperatures, including worsening air pollution, increased risk of wildfires, water scarcity and threats to food security,^[11] with substantial consequences for ecosystems, infrastructure, human health and livelihoods.

There is also growing evidence of the relationship between extreme heat and violence against women. Incidents of domestic and intimate partner violence increase during periods of extreme heat,^{[12],[13]} while climate shocks, including wildfires, climate-related disasters and displacement, are also linked to a rise in gender-based violence.^{[14],[15]} As climate change makes extreme heat more frequent and severe, the risks to women's safety and wellbeing must form part of the UK's response. Rising heat poses serious risks to our economy, our society, and our health, and the UK remains poorly prepared.

Heat and Health

Heatwaves are a growing public health concern. The health risks associated with heat are not evenly distributed: older people, babies and young children, disabled people and those with underlying health conditions are among those who face the greatest risks from extreme heat.^[16]

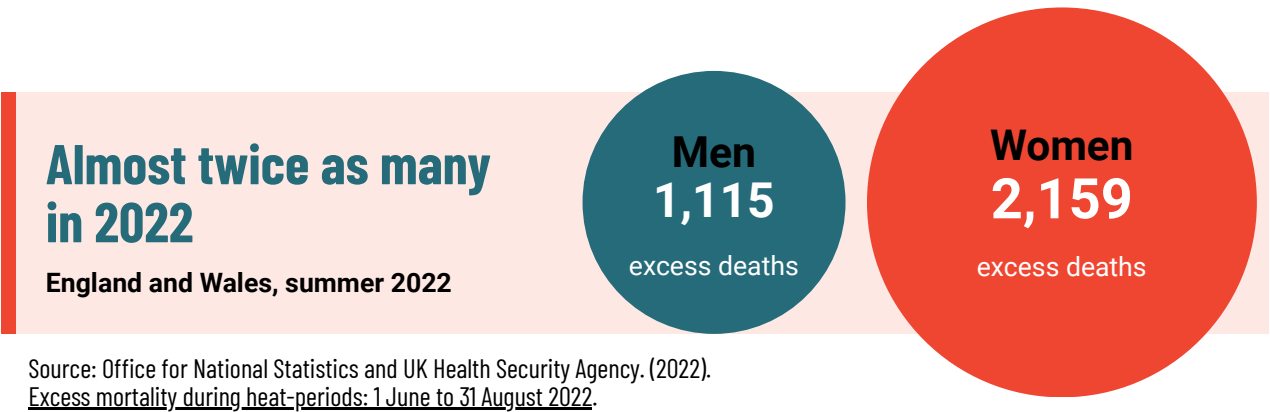
Women can experience particular health risks from extreme heat and are also over-represented in some groups that face greater exposure or vulnerability. These factors can intersect and compound, increasing the risks for some women.

Physical Impacts

Heat-Related Deaths

An estimated 2,877 people have died in England due to the May and June 2026 heatwaves.^[17] Human-caused climate change has nearly tripled the number of heat-related deaths during the 2025 early summer European heatwave.^[18] If global temperatures rise to 2°C, the number of annual heat-related deaths, currently estimated at around 1,400 - 3,000 across the UK, could rise to 3,000 - 10,000 by 2050.^[19]

Gender can play a role in heat-related mortality. Women seem to be at a higher risk of heat-related mortality than men, even when accounting for age,^[20] but the relationship is complex and varies between years. During the UK's 2022 heatwaves there were almost twice as many excess deaths among women (2,159) as among men (1,115).^[21] Data from 2025 showed a different pattern^[22] and the UKHSA 2026 interim heat mortality report^[23] does not include a breakdown by sex. The complex relationship between gender, age, health status and heat risk is an active area of research.



Several factors contribute to this disparity, with age being the largest contributor followed by socioeconomic circumstances,^[24] including income, housing, occupation, caring responsibilities and access to cooling. These shape people's exposure and ability to protect themselves. Physiological mechanisms (e.g. a lower maximum sweat rate, higher core temperatures after ovulation, and on average a bigger surface-area-to-mass ratio) have a relatively small impact on heat mortality, making a focus on socioeconomic determinants all the more important.^[25]

These determinants go beyond gender. Black and Asian individuals and individuals living in the most deprived areas also experience increased risk of heat-related deaths,^[26] highlighting how heat-related mortality reflects the social and economic inequalities in which people live and work.

Our understanding of heat-related mortality is only as good as the data we collect: without consistent sex-disaggregated data in heat mortality and morbidity monitoring, the gendered impact of heat cannot be fully understood, making sex and gender disaggregation across heat health reporting essential.

Thermoregulation

Thermoregulation is an important factor when we think about heat-related illness and death. In high temperatures, thermoregulation - the body's process of maintaining its core internal temperature - requires more energy, intensifying the burden on the heart, lungs and kidneys.^[27] Extreme heat can worsen cardiovascular and respiratory conditions, cause heat exhaustion, heat stroke and dehydration, and compromise cognitive performance, increasing the risk of mistakes and accidents.^[28] While everyone is at risk of dehydration, heat stress, heat exhaustion and heat stroke, caused by high internal temperatures, the risk is higher for those less able to thermoregulate.

Women can face particular challenges with thermoregulation in different situations. People who menstruate experience core internal temperature changes throughout their cycle, with it being higher during the luteal phase,^[29] which may influence thermoregulation. Older women, pregnant women and women going through peri-menopause and menopause are less able to thermoregulate. In addition, women are at a higher risk of overheating and cardiovascular strain due to social norms and circumstances,^[30] including the burden of care and the expectation that women continue household activities, such as cooking, cleaning and caring, during extreme heat.^[31]

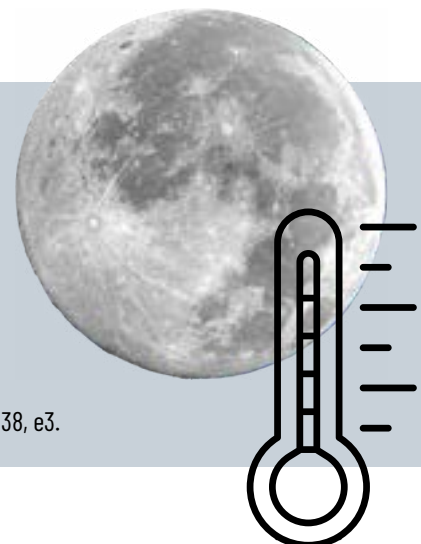
Thermoregulation is further impacted by underlying health conditions, age and medication. Many common prescription and over-the-counter medications, including diuretics, anticholinergic agents, and some psychotropic drugs affect thermoregulation, fluid balance and sweating, and certain gender-affirming hormone therapies (GAHT) for trans women alter temperature perception^[32] and decrease temperature detection thresholds,^[33] making people who take them more vulnerable to heat and therefore more at risk of heat-related illness and death.^{[34],[35]}

Night-Time Heat

**5-10 minutes less sleep
for every additional 1°C**

with women and older adults most affected

Source: Raja, M. et al. (2026). Impacts of heat on sleep quality among heat-exposed workers: a systematic review. *Annals of occupational and environmental medicine*, 38, e3.



High temperatures overnight make it harder for our bodies to recover from the heat stress built up during the day, resulting in disrupted sleep and an increased risk of heat-related illness and mortality. Research shows for each 1°C rise in temperature, sleep is reduced by 5-10 minutes, with women and older adults most affected.^[36]

Night-time heat can have an especially severe impact on those who sleep on the upper floors of poorly insulated homes and in overcrowded accommodation, where it can be difficult to cool bedrooms. For women going through peri-menopause and menopause, hot flushes and night sweats can compound heat-related disruption.^[37]

Older Age

Age is a key risk factor for being impacted by heat, with the UKHSA recognising that people aged 65 and over are particularly vulnerable.^[38]

Women tend to live longer than men and are therefore over-represented in older age groups, who experience some of the most severe health impacts from heat. Our ability to regulate body temperature becomes less efficient as we age, making older adults more vulnerable to heat stress and heat-related mortality. Heat-associated mortality is hence particularly high among the oldest age groups.^[39]

Older adults tend to sweat less and have a reduced blood flow to the skin, making it harder for the body to dissipate heat,^[40] with older women having the lowest ability to lose heat from the body. Heart, lung and kidney conditions also become more common with age, all of which can be worsened by high temperatures. Older adults take more medication, which can disrupt thermoregulation.^[41] A reduced sense of thirst can increase the risk of dehydration, which is more prevalent among older people and particularly people with dementia, who may not recognise the early signs of overheating or be able to take action to keep themselves cool.^[42]

Some older adults can find it harder to travel to cooler spaces during heatwaves due to reduced mobility, financial constraints and a reliance on public transport,^[43] which can itself be disrupted or become dangerously hot.^[44] This can increase the risk of social isolation and make the early signs of heat-related illness harder to spot.^[45] If untreated, heat exhaustion can lead to heat stroke, which can be life-threatening.

For those living and working in care homes and healthcare settings, poor cooling and ventilation can create additional risks. In 2025, care homes saw the largest percentage increase in heat-associated mortality compared with hospitals, hospices or people's own homes.^[46] Research has also identified nearly 10,000 care homes and 1,012 hospitals in high-heat neighbourhoods in England,^[47] putting older adults, people with health conditions and care workers at greater risk. GP surgeries are also struggling to cope with the heat, with staff fainting and the Royal College of General Practitioners advising to move to online services when temperatures reach 30°C.^[48]

Older women are particularly affected. Women aged 65 and over living in care homes in England and Wales outnumber men by 23 to 10,^[49] reflecting in part women's longer life expectancy^[50] and care provided by spouses.^[51] Women also make up the majority of the health and social care workforce and undertake a disproportionate share of unpaid care at home. This unequal burden of care causes greater exposure to extreme heat as recipients and providers of care.

Disability and Chronic Illness

Disabled people and people living with chronic illnesses can be particularly affected by extreme heat, with three-quarters of disabled people reporting that hot weather significantly affects their condition.^[52]

Chronic conditions such as cardiovascular, respiratory disease and diabetes-related conditions are worsened by heat due to the added stress placed on vital organs.^[53] Extreme heat can also worsen symptoms of conditions including epilepsy, Multiple Sclerosis, Postural orthostatic tachycardia syndrome (PoTS), and Ehlers-Danlos Syndromes (EDS),^[54] as well as the side effects of some medications.^[55] Yet, many of the buildings where disabled people live, work and receive medical care have not been designed with high temperatures in mind, making heatwaves a direct risk to their health.^[56]



“My daughter has MS and when there's too much heat her legs don't work properly. During a heatwave she was away on holiday and she couldn't do anything. She had to come home.”

- Suzy, Climate Sister, Manchester

Inequalities in urban infrastructure can make it harder for people with mobility impairments to access cooler spaces. Prosthetics and powered wheelchairs become less reliable or stop working during extreme temperatures and guide dogs may be unable to work safely,^[57] limiting independent mobility and placing added care burdens on their handlers. During the summer of 2026, heatwaves also disrupted the rail network and caused reduced timetables and cancellations leading National Rail to ask passengers to travel only if absolutely necessary.^[58] Failing public transport further restricts independent travel for disabled people, increasing the risk of social isolation.

Women are more likely than men to be disabled.^[59] Disability rates increase with age and the cumulative impacts of care and cleaning work contribute to musculoskeletal conditions and chronic illness.^{[60],[61]} Gender and disability can therefore intersect to create compounded vulnerability to extreme heat.^[62]

Economic inequality further increases these risks. In 2025, the disability employment gap stood at 29.7 percentage points,^[63] while disabled workers also face a substantial pay gap of 15.5%.^[64] Disabled households need an additional £1,095 a month on average to achieve the same standard of living as non-disabled households,^[65] with disabled working-age adults almost twice as likely to live in poverty as non-disabled people.^[66] These pressures can become more acute during

heatwaves, when people may face additional costs for fans, cooling equipment, water and electricity. Yet poverty and high living costs make it harder to afford cooling measures, with 68% of disabled people limiting their use of fans and cooling equipment because of the cost,^[67] leaving those in greatest need of cooling least able to access it.

Mental Health Impacts

The health impacts of heatwaves are not limited to our physical and reproductive health. Heat also impairs brain health, mental health and emotional wellbeing. Growing evidence shows extreme heat can worsen pre-existing neurological and mental health conditions, as well as trigger distress and new symptoms in people with no prior neurological or mental illness.^[68]

During periods of extreme heat, hospital admissions for mental health reasons rise by around 10%^[69] and pre-existing mental illness is consistently among the strongest predictors of heat-related death.^[70] Evidence suggests that people with schizophrenia are particularly affected, with up to three times the risk of death during extreme heat.^[71] Rates of anxiety, manic episodes, self-harm and suicide also rise with hotter temperatures,^[72] as does aggression and interpersonal violence, including gender-based violence.^{[73],[74]}

Several overlapping reasons contribute. High temperatures place physiological stress on the body and brain, which appear to have more pronounced effects in people living with mental illness. Heat affects the brain systems involved in mood, arousal, and cognition, impacting directly on mental and emotional health. Physical discomfort and poor sleep during hot nights further increase anxiety and distress, as well as disrupting routines and coping strategies that people rely on to stay mentally well. Impaired thermoregulation, cognition and insight associated with some psychiatric conditions may reduce a person's ability to stay cool and hydrated, leading to heat-related illness such as heatstroke. Some mental health medications can also interfere with the body's ability to regulate its temperature, and raise the risk of dehydration and electrolyte disturbance. These effects of heat interact with social conditions and structures, including poor housing, financial pressure, caring responsibilities, isolation and stigma.^{[75],[76],[77],[78]}

Gender matters. Women and girls experience higher rates of common mental health conditions,^[79] including anxiety and depression. Young women have seen the sharpest rise in mental health problems of any group in recent years;^[80] whilst menopausal women have an increasingly recognised elevated risk of depression.^[81] Antidepressant medications that are used to treat depression and anxiety carry heat-related risks, such as dehydration associated with excessive sweating.^[82] Of the 9.1 million people prescribed antidepressants in England in 2025/26, 5.9 million were female, making up 65%.^{[83],[84]} This is strongly patterned by deprivation: around 17% of women in England's poorest households receive antidepressants, compared with 7% in the wealthiest.^[85] Therefore, women who are taking medication that affects heat tolerance are amongst those who are also more likely to live in housing at risk of overheating, with the least access to cooling, respite or time away from work and caring duties.

Women face greater exposure to some of the pressures that make heat harder to cope with, including poverty and financial insecurity, caring responsibilities and gender-based violence. School closures and the loss of outdoor and community spaces may keep people isolated at home and affect childcare and support, leaving those already facing disadvantage with fewer resources to cope. Isolation and loneliness are established risk factors for depression, anxiety and self-harm, and they also reduce the likelihood that deterioration in someone's mental health

is noticed early enough to act. Stigma already discourages help-seeking, and these effects compound to act as barriers to seeking help and healthcare. For women experiencing intimate partner abuse, more time confined at home with a perpetrator is a direct risk, at the same time that protective avenues that provide support or relief, such as the school run, work or community groups, are closed off. The compounding risks are clear: increased exposure, physiological vulnerability, and reduced capacity to adapt.

Heatwaves can also increase psychological distress^{[86],[87]} by making the impacts of climate change more immediate and personally tangible. Young women report the highest levels of climate-related distress, with 79% of women reporting eco-anxiety, compared to 72% of men.^[88] Friends of the Earth polling in July 2026 also found that 91% of women, compared to 83% of men, felt the UK was unprepared for extreme weather events.^[89] And after this summer's heatwave, 53% of women, compared to 45% of men, reported feeling more concerned about the health impacts of hotter weather.^[90]



“Seeing everything so dry and burnt made me feel really sad.”

- Suzy, Climate Sister, Manchester



Reproductive Health Impacts

As we have seen, women are disproportionately impacted amongst affected groups, such as older people and people with disabilities. However, extreme heat also has impacts that are specific to women's bodies by interfering with women's reproductive health. Pregnant women and women going through (peri)menopause are particularly affected, and adverse reproductive health outcomes are higher for the most disadvantaged mothers, racialised and marginalised women, and women on low incomes.

Pregnancy

This section has been contributed by the Birth Companions Institute, drawing on Birth Companions' expertise supporting women experiencing pregnancy and early motherhood in some of the most challenging circumstances.

Heat and Pregnancy

Pregnancy changes the way the body regulates temperature, meaning pregnant women can face serious health risks from extreme heat, including pre-term birth and stillbirth.^{[91],[92]} UK-based analysis shows that the number of days pregnant women face elevated heat risk has roughly doubled since 2020, to an average of 13 additional risk days a year.^[93] The heatwaves in 2026 have worsened this picture.

Crucially, these risks are not experienced equally. Pregnant women from the most deprived communities in the UK are disproportionately exposed to the risks of heat, compounding existing health inequalities.

The growing frequency and severity of UK heatwaves mean urgent, targeted action is needed to keep pregnant women and their babies safe in our rapidly changing climate – yet current guidance, healthcare provision and policy have not kept pace with this growing risk.

What the Evidence Shows

A large and growing body of international research has long established the risks of heat exposure during pregnancy. A systematic review and meta-analysis of 198 studies across 66 countries found that maternal exposure to heatwave conditions was associated with a 26% increased risk of pre-term birth, alongside elevated risks of stillbirth, congenital anomalies, antenatal bleeding and prelabour rupture of membranes.^[94] Further research has found that heat can also trigger labour outside the typical preterm window, and produces consistent physiological stress responses in mother and baby, particularly where the mother has pre-eclampsia.^{[95],[96]} These risks will intensify as temperatures continue to rise. There is also evidence that extreme heat affects the ability to conceive in the first place: one study found that unusually hot days caused a fall in conception rates two weeks later, and in birth rates eight to ten months later.^[97]

Until recently, the UK-specific picture was far less clear, and current policy responses do not yet reflect the scale of the risk. The Climate Change Committee has warned that the UK health system is not equipped to respond to the growing threats posed by extreme heat.^[98] The Wellcome Trust's 2026 report, 'Pregnancy in a Warming World', found that pregnant women are not consistently recognised as an at-risk group across public guidance and departmental frameworks.^[99] For instance, while the UK Health Security Agency's public 'Beat the Heat' guidance explicitly names pregnant women as a group needing extra care in hot weather, NHS public heatwave advice does not mention pregnancy at all.^{[100],[101]} A woman searching for advice on staying safe may therefore only find it if she happens to look in the right place.

Crucially, the risks to pregnant women are not confined to extreme, official 'heatwave' conditions. Clinically significant harm can occur at temperatures well below the thresholds that trigger heat alerts, particularly where someone is not acclimatised to that level of heat. Current alert systems, largely designed around acute heatwave thresholds, may miss risks to pregnant women,^[102] as well as opportunities to protect them and their babies.

Evidence is also emerging of extreme heat impacting the experience and safety of birth in the UK. Freedom of information data from 33 NHS trusts recently found temperatures on hospital wards averaged 31.9°C in July 2026, above the 28°C safety limit set by NHS England, with unions warning that hospitals have become "dangerously hostile environments" for patients and staff alike – and pregnant NHS staff themselves reporting that the heat affected their health while on shift.^{[103],[104]} In June 2026, several NHS trusts declared critical incidents after failing chiller units knocked out operating theatres, cardiac catheter labs and diagnostic scanners during the heatwave.^{[105],[106]} The Royal College of Midwives has raised concerns about overheating and poor ventilation in maternity units, calling for maternity facilities to be "climate-proofed" through improved cooling and ventilation.^[107]

Maternity wards are overheating

During extreme heat, maternity settings can become unsafe for women, babies and staff

Recorded temperature

31.9°C

Average recorded on hospital wards in July 2026

Safety limit

28°C

Set by NHS England

The recorded average was nearly 4°C above the safety limit.

Sources: Campbell, D. (15 August 2026). [Dangerously hostile: heatwaves leave hospital wards unsafe, data reveals](#). The Guardian. Walker, P., Thomas, T. and Adu, A. (13 August 2026) [Nurses fainting, inhumane conditions due to extreme heat, UK union warns](#). The Guardian.



Emerging Evidence from Wales and London: the MAGENTA Study^[108]

Important UK-specific research is emerging from the Maternal and Pregnancy Health and Elevated Heat (MAGENTA) study, a Wellcome-funded project led by Swansea University in partnership with University College London.

MAGENTA links large-scale health data, covering more than 300,000 births in Wales and 1.1 million births in London, with heat mapping, home environment monitoring and biological sampling, to understand how heat exposure interacts with deprivation, housing and other local factors to shape pregnancy outcomes - and what this could mean for the future.

Current analyses are investigating the impact of heat exposure during different stages of pregnancy on gestational age at birth and birthweight. In parallel, data have been collected directly from mothers to better understand the biological effects of heat stress on maternal, fetal, and placental health. In the final phase of the project, the researchers will use these findings to model future pregnancy outcomes under a range of climate and heat-exposure scenarios.

The findings, expected in early 2027, will help inform policy and planning by estimating the potential impact of future heat events on maternal and infant health, healthcare resource requirements, and the effectiveness of possible mitigation and adaptation strategies.

Heat and Inequality in Pregnancy

Illustrative scenario: this shows how inequalities can combine to increase heat risk during pregnancy

Jolene is seven months pregnant this summer, living in a fourth-floor flat where her local council temporarily placed her after she had fled an abusive relationship. The estate has no trees or green space, and sits in one of the city's hottest urban heat islands – concrete and tarmac holding the day's heat long into the night. The flat's bedroom windows don't open properly, and the landlord has ignored three requests to fix them; during the last heatwave, the room stayed above 30°C through the night.

Jolene can't afford an effective fan or regular journeys to cooler public spaces, like the library. She often feels too sick and dizzy from the heat to cook or eat properly, and swollen ankles make the four flights of stairs down for fresh air increasingly difficult. At a midwife appointment in a clinic with no working cooling of its own, her blood pressure is found to be dangerously high, and she's rushed to hospital – where the ward, too, is struggling to stay cool. Her baby is born early, at 35 weeks, healthy but small. Jolene still doesn't know if the heat caused her early labour, only that the doctors told her they'd cared for many women like her that summer. Back home, she now faces keeping a newborn cool in the same overheating flat, worried for her baby's health.

The council says it is looking for alternative accommodation for Jolene and her baby, but there is not much available and many other mothers are in a similar situation. She hopes the autumn will bring some relief.

Jolene's experience illustrates how heat risk in pregnancy can be compounded by where a woman lives, her income and the inequity and disadvantage she already faces. These factors shape both her own exposure to extreme temperatures, and how much control she has to protect herself.

Housing is one of the clearest dividing lines. International evidence shows elevated heat-related pregnancy risk in neighbourhoods with concentrated economic disadvantage.^{[109],[110]} For a pregnant woman, this can mean spending the hottest days and nights of the year in a home that is actively working against her health. The scale of the problem is stark: nine in ten UK homes are at risk of overheating, a figure the Climate Change Committee expects to rise as temperatures increase, with retrofitting and cooling standards not keeping pace.^{[111],[112]} Many of the most disadvantaged pregnant women have no control over the home they live in. Women in temporary or emergency accommodation are often placed in the poorest quality housing stock available, with no say over insulation, ventilation, or access to outdoor space, and no power to make the changes that would keep them safer in extreme heat. In these circumstances, retrofitting and heat-proofing become the responsibility of a landlord or local authority, and one that is too often neglected.

Pregnant women in prisons, immigration removal centres, and parenting assessment units have even less control over their environment. They cannot simply leave a hot building and have little control over ventilation, cooling, or access to water and fresh air. While heat risk in these settings is starting to receive attention, as with recent government-commissioned research into prison overheating,^[113] pregnant women are not always recognised as being at heightened risk. While fans or other basic provisions may be available in some of these settings, there is little indication they provide sufficient cooling. Immigration removal centres and parenting assessment units lag further behind, with little evidence of similar research or guidance existing at all. The same problems can affect maternity wards, GP surgeries and children's centres that are not consistently equipped to stay cool during extreme heat.

Pregnant women in insecure, low-paid or physically demanding work,^[114] including outdoor work, caring roles, and hospitality and retail, may have far less ability to reduce their own heat exposure. Financial insecurity can make it harder to take time off, even when heat is affecting their health or pregnancy.

Access to cool public spaces is also unequal. Provision remains patchy and inconsistent across the UK and, where cool spaces exist, they are often poorly publicised or concentrated in wealthier areas. Reaching them can be difficult or expensive. For a pregnant woman on a low income, a bus or train fare to a park, library or friend's home with better cooling may be an expense she cannot regularly afford. The journey itself can also be a source of risk: walking, or waiting for public transport and travelling on an overheating bus or train can create additional heat exposure in its own right.

Heat risk in pregnancy also intersects with racial inequality. International research has found that the risk of spontaneous preterm birth linked to extreme heat exposure is significantly higher for women of colour than white women, even after accounting for other social and economic factors.^[115] These findings are particularly relevant given well-documented racial disparities in maternal health in the UK, including in maternal mortality rates.^[116]

Taken together, these gaps mean that the response to extreme heat in pregnancy still relies overwhelmingly on individual women's ability to protect themselves, rather than on the systems and buildings around them being designed to keep them safe.

Beyond Birth: Postnatal and Infant Risk

Newborns and infants are particularly vulnerable to heat because their bodies are less able to regulate temperature.

Infants face some of the sharpest heat-related risks of any age group. The first week of life has been identified as the "most critical window of susceptibility to heat" in infants, with infant mortality rising during periods of extreme heat.^[117]

While all infants are impacted by heat, the burden of care falls disproportionately on women who undertake most of the childcare in the UK.^[118] The need for care increases during periods of extreme heat, including increased monitoring and hydration.

Analysis published in June 2026 found that more than 70,000 babies under the age of one – one in six – are already living in overheated homes in England, increasing their risk of serious harm including sudden infant death syndrome.^[119]

Very young children are also particularly vulnerable to heat-related harm arising from conditions such as kidney problems, asthma and dehydration.^[120] Heat exposure in infancy has also been linked to more rapid infant weight gain, which carries a well-established association with obesity, and its related health risks, later in childhood and adulthood.^[121]

These risks continue as children grow. Young children depend on adults to keep them cool and hydrated, and those living in poverty or overheating homes can face particular risks. More than 10,000 nurseries are in heatwave hotspots,^[122] while nursery closures during periods of extreme heat can place additional pressure on families and force parents to reduce their working hours. While all infants are affected, those living in poverty or in overheating homes face the highest risk. Keeping young children from the heat at home is especially challenging for the 4.5 million children living in poverty across the UK.^[123]

These impacts are also gendered. Women continue to undertake a disproportionate share of childcare in the UK and are heavily represented among paid carers working in overheating nurseries and unpaid carers at home. During heatwaves, caring for babies and young children requires additional monitoring, hydration and efforts to keep them cool, with women more likely to absorb these additional responsibilities.

For a woman recovering from birth in an overheating home, caring for a newborn who cannot regulate their own temperature, without additional support, can create a distinct double burden and serious risk that current heat-health guidance does not address. More widely, women focused on keeping children safe during extreme heat may have less time and opportunity to meet their own cooling needs.

Maternal and infant health are closely connected, while the unequal distribution of caring responsibilities means that protecting children from rising temperatures also needs to be understood as a gendered issue.

Menopause

An estimated 13 million people - around a third of the UK's female population - are currently perimenopausal or menopausal.^[124] Yet this group is often overlooked in heat-health guidance and climate adaptation policy.

Women going through perimenopause and menopause may experience extreme heat more intensely because menopause influences thermoregulation.^{[125],[126]} For 50-80% of women, hot flushes are a characteristic symptom of menopause,^[127] and alongside night sweats and palpitations these become extra disruptive during periods of extreme heat. External heat places additional strain on an already sensitive temperature regulation system and high night-time temperatures combined with hormonal changes can severely disrupt sleep. Emerging evidence also suggests air pollution - which worsens during heatwaves and disproportionately affects women in low-income and racialised and marginalised communities - may also contribute to earlier menopause and worse health outcomes during the menopause transition.^[128]

Menopause is therefore an important and under-recognised consideration in heat-health policy. Perimenopause often begins in women's 40s, well before the age thresholds used to identify people as particularly vulnerable to heat. Women in their 40s and 50s are therefore experiencing a vulnerability to heat without specific recognition or support.

These experiences are also shaped by wider inequalities. Access to menopause support is not equal. Black women face barriers to menopause support through misdiagnosis, dismissal of symptoms and a lack of culturally appropriate education and support.^[129] Black and Asian women are less likely to be prescribed HRT, disabled and neurodivergent women face barriers including inaccessible appointments, women on low incomes or without stable housing often cannot access care or medication, and people of marginalised genders are frequently excluded by gendered language in menopause services.^[130] This means that the women already most exposed to heat are also least likely to receive the support that could reduce their physiological vulnerability to it.



“I'm over 50, and when I went through the menopause I became more sensitive to the heat. The hormones change and everything changes.”

- Helen, Climate Sister, Manchester



Compounding Health Risks

The physical and mental impacts of heat do not exist in isolation. When older age, disability, pregnancy, mental health conditions, or other factors that increase sensitivity to heat coincide, their health impacts compound. There is still relatively little research on what happens when multiple climate-related health impacts accumulate across a population simultaneously. But the implications for health services, care systems, schools and workplaces are significant and growing.

Above all, these health impacts are shaped by the interaction between physiological risks and the social and economic conditions in which people live, which we explore further below.

Beyond Temperature

The health impacts of heatwaves extend beyond temperature itself. Hot, dry conditions worsen air pollution, increase the risks of drought, wildfires, food insecurity and gender-based violence, as well as driving up food prices.

Air Pollution

Air pollution can worsen in high temperatures, and is linked with respiratory and cardiovascular illness. For women, exposure to air pollution increases the risks of breast cancer^[131] and heart disease,^[132] while also contributing to significant reproductive health impacts, including infertility and pregnancy complications such as miscarriage, pre-term birth and stillbirth.^[133]

Racialised women and women living in low-income and deprived areas are disproportionately exposed to unsafe levels of air pollution due to inequalities in planning, transport infrastructure and industrial siting.^{[134],[135],[136]} The case of Ella Adoo-Kissi-Debrah illustrates the intersection of race, geography and environmental harm. She was a Black girl from the London Borough of Lewisham, who became the first person in the UK to have air pollution recorded as a cause of death on her death certificate.

Drought and Wildfires

Rising temperatures also increase drought and wildfires, both of which have direct and indirect health impacts. Drought has been associated with a 26% higher likelihood of mental health conditions among affected populations, while wildfires have been linked to post-traumatic stress disorder in affected populations.^[137]

Drought and wildfires can also affect health indirectly through worsened air quality, reduced access to safe water, greater risk of infectious disease, and increased food insecurity and prices.^[138] In 2026, England and Wales recorded their driest July on record,^[139] following England's driest spring in over 100 years in 2025^[140] and the worst drought in England since 1976 during the summer of 2022.^[141]

At 2°C of warming, some UK summers could see roughly half the current level of summer rainfall by 2050, risking dry taps and dangerously low river levels.^[142] Hotter and drier summers also increase the risk of wildfires and, at 2°C of warming, the number of fire risk days could double,^[143] with substantial consequences for ecosystems, infrastructure, human health and livelihoods.

Food Insecurity

In the UK, heatwaves, drought and other extreme weather impact agriculture, resulting in poor harvests, reduced milk yield from dairy cows, increased poultry deaths during transportation, and the spread of pests and disease.^[144] This summer's extreme heat and drought are projected to have produced the worst harvest on record in the UK, with the 2026 harvest estimated to be around 1.35 million tonnes smaller than the previous record low in 2020 – making four of the five worst harvests on record likely to have occurred this decade.^{[145],[146]}

Poor domestic harvests also increase the UK's reliance on imported food, at a time when 13% of the UK's food imports come from the most climate-vulnerable and least climate-resilient nations.^[147] Around a quarter of the UK's food comes from the Mediterranean, which is also particularly impacted by rising global temperatures and increasing water stress.^[148]

These pressures can contribute to shortages and increased prices. Heatwaves and floods could push UK food prices up 34% by 2050.^[149] One third of food price inflation in the UK is a result of climate change, with extreme weather adding £361 to the average household food bill in 2022 and 2023.^[150]

These impacts are not evenly felt. Women on low incomes, who disproportionately manage household food budgets,^[151] are hit hardest by rising food costs. People with lower socio-economic status, pregnant women and young children are at the highest risk of malnutrition.^[152] Women act as the 'shock absorbers' of poverty: cutting back or going without food themselves to protect other family members, rather than reducing spending on children.^[153]



Women on low incomes, who disproportionately manage household food budgets, are hit hardest by rising food costs.

Gender-Based Violence

Extreme heat and climate-related shocks, such as wildfires and displacement, are linked to a rise in gender-based violence.^{[154],[155]} Domestic violence incidents increase during heatwaves, adding another health impact of extreme heat.

Women trapped at home during periods of extreme heat with an abusive partner face compounded risk, with fewer opportunities to leave, access support, or be seen by others. Extreme heat also increases stress, financial pressure and the time spent indoors, which can intensify the risk of domestic violence.^{[156],[157],[158]}

Structural Exposure In Heat

The health impacts of heat go beyond a matter of physiological vulnerability. The groups most vulnerable to heat are those who, because of social inequalities, are most exposed to high temperatures in the first place, while also having fewer resources and opportunities to protect themselves. People on low incomes, outdoor workers, people working in buildings without cooling, and racialised and marginalised groups and communities disproportionately concentrated in urban heat islands are most exposed to high temperatures.^[159]

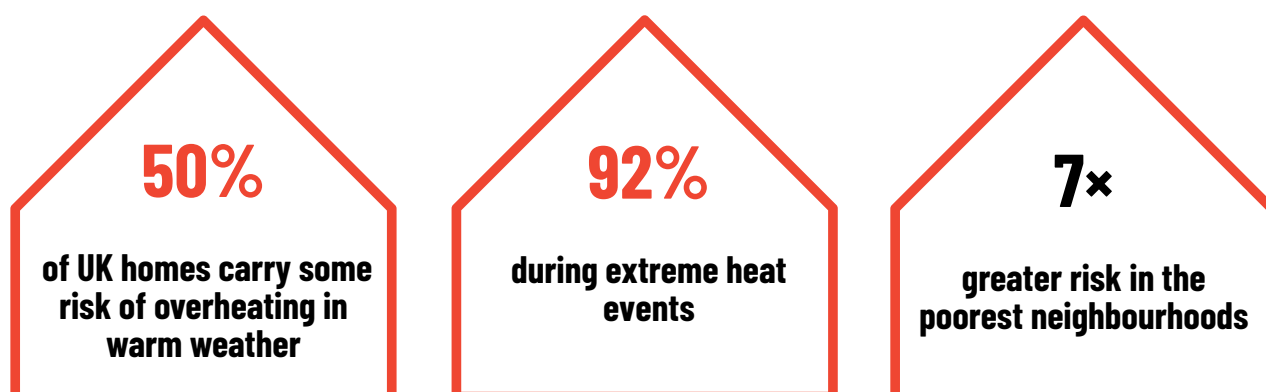
Who experiences heat, who can escape it, who has access to green space and whose neighbourhood receives investment in adaptation are ultimately questions about how environmental risks and resources are distributed. Heat vulnerability is shaped not only by our bodies, but by where we live, work and care for others, and by the resources available to protect ourselves.

Housing

Much of the UK's housing stock was not built with high temperatures in mind, and without significant retrofitting, many homes will become increasingly unsafe to live in.^[160] Housing inequality shapes heat exposure through the characteristics of the home - including its insulation, building type, floor level and age - as well as people's ability to cool it and how much time they spend there. Women are more likely to live in social housing and depend on housing benefits,^[161] and their economically disadvantaged position can increase their likelihood of living in homes at risk of overheating. This is in part due to the deprivation gradient in the availability of green space.^[162]

Overheating Homes

Around half of UK homes are currently at risk of overheating in warm weather. This number rises to 92% during more extreme heat events,^[163] with homes in the poorest neighbourhoods seven times more likely to be at risk.^[164] Over half of the poorest fifth of households experience excessive indoor heat, compared with less than a fifth of the wealthiest,^[165] driven by housing quality, building design, and location.



Sources: Climate Change Committee. (2026). A well-adapted UK: The fourth independent assessment of UK climate risk (CCRA4-IA). End Fuel Poverty Coalition. (2026). Worsening climate extremes will place new demands on households.

Low-income households, social renters, racialised and marginalised communities, and families with young children or older adults are most likely to live in dangerously hot homes. Women are disproportionately represented among some of these groups.^[166]



“I realised for the first time that these homes are not made for the heat. The heat just comes inside the house, especially upstairs where the bedrooms are. You think: where are we supposed to sleep, where are we supposed to go?”

- Climate Sister, Manchester

Overheating Neighbourhoods

Cities are particularly affected by rising temperatures because of the Urban Heat Island (UHI) effect, where buildings, roads, and other surfaces absorb and retain solar radiation, resulting in temperatures up to 12°C higher than in surrounding areas.^[167] As a result, urban areas heat up more than surrounding rural areas and trap the heat at night, exacerbating the health impacts of heatwaves. The hottest neighbourhoods are often those with limited green space, and 1960s building stock.^[168] Racialised and marginalised groups are more likely to live in these areas, and in housing that is poorly adapted to high temperatures.^[169] Of the 1,920 neighbourhoods identified as most at risk, 37% of residents are people of colour - twice the national average.^[170]

Heat exposure is therefore shaped not only by whether an individual home overheats, but by the wider neighbourhood in which it is located.

Ability To Cool the Home

People’s ability to respond to overheating is also unequal. Low-income and racialised and marginalised households have limited ability to afford cooling solutions, such as fans, ventilation or air conditioning, while renters may be unable to make changes to their homes.

Homes occupied during the day overheat significantly more than those left empty, and top-floor flats of blocks built in the 1960s (which make up the majority of England's social housing stock) are among the most vulnerable to overheating.^[171] Overcrowded homes generate more internal heat from body heat and appliance use, raising indoor temperatures further still. Renter, low-income, racialised and marginalised,^[172] and single-parent households are more likely to live in overcrowded homes.^[173]



“We were searching everywhere for fans and air conditioning and they were completely out of stock. When they appeared again, they were triple the price. Then there were the energy bills. We were struggling and trying to find a good fan we could afford.”

- Climate Sister, Manchester

Time Spent At Home

Residential overheating poses the greatest risk to those who spend most time at home, including older adults, disabled people, carers, and those not in paid employment. Women can face greater exposure because they continue to undertake a higher share of unpaid caring responsibilities and domestic labour such as cooking.^{[174],[175]}

Unpaid Care Responsibilities

Women undertake a disproportionate share of unpaid care responsibilities: 59% of unpaid carers in England and Wales are women.^[176] Carers spend more time indoors, have less ability to seek cool spaces and fewer opportunities to take breaks. Many caring activities become physically demanding in extreme heat, while caring duties often increase in hot weather.

These pressures are also shaped by income and geography. Economically deprived areas have higher rates of unpaid carers: 10.1% of people in the most deprived areas are unpaid carers, compared with 8.1% in the least deprived.^[177] Carers are also more likely to live in poverty, with 23% living in poverty compared with 20% of people without caring responsibilities.^[178] Caring for other adults is also linked with poor health,^[179] including mental health.^[180]

Research on the specific heat-related risks faced by unpaid carers remains limited, reflecting the invisibility of unpaid care work.

Workplace Environment

For some, especially those in air-conditioned offices, the workplace can provide respite from the heat. For many others - from nurses working on overheating wards to fruit pickers working in direct sun - the workplace is an additional source of heat stress. Heat exhaustion, dehydration and exposure to ultraviolet rays are among the biggest health risks associated with working in extremely hot conditions.^[181]

Women spend 30-50% more working time above heat-stress thresholds than men, and even when men and women do the same job, women can experience greater workplace heat exposure.^[182] These differences are structural: clothing requirements, access to breaks, and assumptions about which jobs are physically demanding can all affect workers' exposure.^[183]

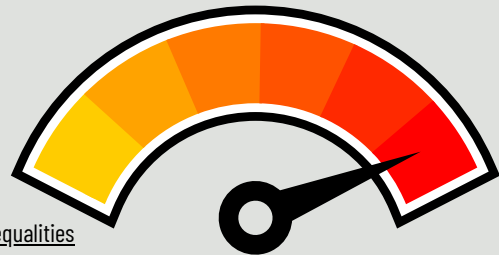
High workplace temperatures and limited airflow also increase the risk of heat-related illness, dehydration,^[184] accidents and injuries.^[185] A survey of workers during the June 2026 heatwave found that 87% reported at least one health impact, from disrupted sleep to dizziness and fainting, with women among the groups most likely to report their health was harmed.^[186]

The Health and Safety Executive recommends a minimum workplace temperature of 16°C,^[187] but there is currently no legal maximum working temperature in the UK, despite the World Health Organization recommending 24°C as a maximum comfortable working temperature and the Trades Union Congress calling for a maximum work temperature of 30°C or 27°C for strenuous work.^[188] Polling in July 2026 found that 83% of women supported the introduction of a legal maximum workplace temperature, compared with 75% of men.^[189]

Pregnant workers and those with existing health conditions are at a higher risk of heat exhaustion. Outdoor workers face increased exposure to heat and UV radiation, while some personal protective equipment (PPE) (including overalls, masks, respirators, aprons and hoods) impede the body's ability to cool itself.^[190] PPE designed around male bodies can be heavier and less breathable for women.^[191]

Women spend 30-50% more working time above heat-stress thresholds than men

Source: Business & Human Rights Resource Centre. (2026). Global: Gender inequalities leave women more exposed to occupational heat stress, researchers find.



Overheating Sectors

Women are overrepresented in some of the sectors most exposed to workplace heat, including health and social care, education and retail. Home care workers climb stairs and assist clients in poorly ventilated homes and hospital cleaners and nurses work in environments made more demanding by protective equipment.^[192]

Women make up 77% of the NHS workforce^[193] and 90% of the nursing workforce.^[194] Overheating in NHS buildings is well documented: the Climate Change Committee reported 3,600 overheating incidents in NHS Trust buildings in 2019–20 and estimates that 90% of UK hospital wards are at risk.^[195] Two thirds of care staff in care homes reported being too hot three or more times per day during heatwaves, while 90% reported that the heat affected their ability to perform tasks.^[196]

Women also make up 76% of the teaching workforce, 94% of administrative staff and 93% of teaching assistants.^[197] Some school spaces already reach 35°C on one or two days a year and

without adaptation could become unsuitable for learning for up to eight days a year during extreme heat.^[198] Nine in 10 teachers reported taking additional steps to make classrooms bearable in hot weather, with some personally purchasing fans without reimbursement.^[199]

Many heat-exposed sectors with high proportions of women are also relatively low-paid, leaving workers with fewer financial resources to protect themselves.

Double Exposure

Heat exposure does not end when the working day finishes. Workers' vulnerability is not limited to the workplace and health and safety risks can arise during commutes and travel disruptions.^[200] After work, women disproportionately return home to cook, clean and care for children; these caring responsibilities leave them with higher total heat exposure across the day.^{[201],[202]} This creates the potential for compounding heat exposure among lower-paid workers, both at work and at home.



“We leave the house at 7.30 in the morning and get back at 7.30 at night. After being out for 12 hours, you come home and it feels like an oven. The bedrooms are so hot.”

- Rafia, Climate Sister, Manchester

Access to Green Space

Green spaces can protect people from extreme heat by cooling neighbourhoods, providing respite, and supporting wellbeing. However, the extent to which people have access to green space, and thereby access to cooling, is not equal.^[203]

The benefits of green space are unequally distributed by race, income and geography, with higher-income households and people living in rural or suburban areas more likely to have access. Areas with abundant trees and grass have lower rates of heat-related hospital visits and mortality,^[204] as well as improved air quality^[205] and mental health benefits.^[206]



Green space is particularly important in cities, where the Urban Heat Island effect is intensified.^[207] Trees, parks, vegetation and wetlands act as natural cooling infrastructure,^[208] lowering temperatures by up to 5°C.^[209] Limited street shading and tree cover in some lower-income neighbourhoods leaves these areas disproportionately exposed. In London, some of the lowest average tree-canopy cover - around 13% - is found in boroughs including Barking and Dagenham and Newham, which also have among the capital's lowest average household incomes.^[210]

Poverty and Wealth Inequality

Poverty and wealth inequality run through all these forms of structural heat exposure. Income affects the homes and neighbourhoods people live in, the work they do, their access to green space and how they are able to adapt to the heat.

People in more deprived areas are more exposed to extreme heat, due to poorer quality housing, lack of air conditioning and access to green space.^[211] Many of the groups already at greater health risk from heat are also more likely to be living in poverty.

Women are particularly affected by this intersection. Women in the UK are more likely to experience persistent low income (22% compared to approximately 14% of men^[212]) and rely on social security.^[213] 58% of people receiving Universal Credit and 66% of people receiving Pension Credit are women.^[214] Families with children, especially lone-parent families, racialised and marginalised households, disabled people, unpaid carers, and renters also experience higher rates of poverty,^[215] with women overrepresented across some of these groups, particularly lone-parent families^[216] and unpaid carers.^[217] The risk of temperature-related hospital attendance and mortality is highest for the 20% with the lowest income.^[218]

The risk of temperature-related hospital attendance and mortality is highest for the 20% with the lowest income.

Poverty therefore affects not only people's exposure to heat, but their ability to escape it or adapt to it.



“I'm a single parent and I'm still on benefits, so I have to think about my budget. I open all the windows for ventilation, but I've had to compromise on so many things because of what I can afford.”

- Rafia, Climate Sister, Manchester



Compounding Vulnerabilities: An Intersectional Picture

The layers of unequal exposure to heat do not exist in isolation: they stack up. A household in an overheating home is also more likely to contain someone working in an overheating hospital, school or care setting; more likely to include an unpaid carer with limited ability to leave the home during a heat alert; and less likely to have access to safe, nearby green space.

Each factor alone increases heat risk. Together, they can compound, meaning people facing multiple forms of vulnerability simultaneously face the greatest heat risk.^[219]

This is the reality for many women across the UK. A disabled woman with mobility issues may struggle to leave home during heatwaves, and become even more isolated when lifts or public transport break down. A woman in an abusive relationship is at increased risk of violence as well as social isolation. An unpaid carer may spend the day looking after family members in sweltering rooms, only to struggle to sleep herself because of the heat. A pregnant woman may be forced to continue physically demanding work during heat because she cannot afford to lose income, only to get home exhausted to an overheating flat.

These experiences demonstrate why heat vulnerability cannot be understood through a single characteristic. An intersectional approach looks at how these inequalities interact - and how the combination can shape both exposure to heat and people's ability to protect themselves.

Besides being disproportionately impacted by heat, women also hold knowledge about what works and have created resilient solutions to cope with the rising temperatures. Heatwave policy must reflect both the unequal risks women face and the knowledge and solutions they and their communities already hold.



“We are a small group, all together talking about climate change, health and heat. We are Climate Sisters. We listen to each other and share our knowledge.”

- Helen, Climate Sister, Manchester

A fair approach to climate adaptation means the cost of adapting to rising temperatures should not fall on those who can least afford it. Yet people living in poverty are more likely to be structurally exposed to heat, less able to afford cooling and adaptation measures, and more likely to face increased physical risks as a result.

The people most exposed to heat also hold valuable lived expertise about its impacts and changes that would make a difference. Yet they are too often excluded when it comes to developing the response to extreme temperatures. A fair approach to adaptation must prioritise those most exposed to heat and least able to adapt, both through investment in their homes, workplaces, neighbourhoods, and by ensuring they have a meaningful role in shaping solutions.

The Policy Gap

Embedding Equality in Climate Adaptation

Heat vulnerability is not distributed equally. Factors shaping heat exposure, including housing, income, employment, caring responsibilities and access to green space, all intersect and interact with age, health and disability. A policy response needs to reflect this interaction, requiring an integrated approach across government departments.^[220]

The Adverse Weather and Health Plan, led by DHSC, provides the framework for the UK's response to extreme heat. However, long-term adaptation, including the structural changes needed to reduce unequal exposure, requires leadership within DEFRA for the shaping of the next National Adaptation Programme (NAP4), which is meant to set out how the country prepares for and responds to the impacts of climate change. To reflect the wide and compounding impacts of heatwaves, DEFRA must co-ordinate with DHSC, MHCLG, the Department for Transport and local government. The National Heat Risk Commission's recent report^[221] also identifies the HSE's autumn 2026 consultation on workplace temperatures, the 10-Year Capital Plan for Health and Social Care, and the Education Estates Strategy as key opportunities to embed heat resilience.

Existing heat-risk plans consistently fail to account for the complex nature of heatwave impacts. Adaptation responses have been largely reactive and siloed, focussing on heat once it occurs rather than the underlying structures that determine who suffers most.^[222] Implementation also fails to reach communities facing the greatest structural inequalities. NAP3 does not meaningfully recognise the disproportionate impact of heatwaves on women. Nor does it account for the way gender intersects with race, disability, class, age and other forms of inequality. As a result, adaptation is not designed around the circumstances of those most vulnerable to heat.

The economic cost of inaction is substantial. The June 2026 heatwave is estimated to have cost over £1 billion in lost output alone, on top of health system pressures.^[223] Heat-related productivity losses in London alone could exceed £500 million annually,^[224] while disrupted sleep costs the UK economy an estimated £60 billion per year.^[225] These costs fall onto the already disadvantaged. A feminist lens goes beyond the question of how much heatwaves cost us, and instead examines who pays the price for inaction.

With NAP4 around the corner, there is an opportunity to move from a reactive and gender-blind model towards an adaptation plan that addresses structural causes of heat risk. A feminist lens is herein essential. A feminist approach to adaptation recognises how inequality shapes exposure and capacity to adapt to heat, and ensures that those most affected have a meaningful role in designing the response.

The COVID-19 pandemic showed us that rapid emergency mobilisation is possible when there is sufficient political will. Without similar urgency on heat adaptation, the UK risks serious disruption to the health, social care, childcare and education systems on which communities depend and women disproportionately make up the workforce.

NAP4 must put those most impacted by heat at its centre, and prioritise reducing unequal exposure to heat.

Recommendations: Towards Feminist Heat Adaptation

These recommendations are grounded in a core feminist principle: heat vulnerability should not be assessed purely through individual physiological characteristics, but through the social and economic conditions in which people live, work and care.

The UK's Fourth National Adaptation Programme (NAP4) provides an important opportunity to put this feminist principle into action. Given the scale of the challenge and its links to health and health inequalities, it must be developed across government rather than by DEFRA alone. Our recommendations sit alongside the National Heat Risk Commission's recent report^[226] which sets out ten areas for action on heat resilience including calls to cool public services, strengthen workplace protections, improve heat alerts and protect those most at risk.

Across all heat adaptation measures, we are calling for:

- Gender and equality impact assessments of adaptation measures.
- Consistent collection of disaggregated heat-health data, including by gender, race, disability and income level.
- Meaningful co-production with frontline communities following the disability justice sector's principle of "nothing about us without us."

1. Make homes cooler

- **Launch a national and centrally funded retrofit programme**, with grants accessible to renters as well as homeowners and investment prioritised towards the homes and neighbourhoods most at risk of overheating.
- **Build more social and genuinely affordable housing** alongside the retrofit programme.
- **Introduce stronger cooling standards for homes**, prioritising insulation, ventilation and shading rather than just air conditioning.
- **Strengthen building regulations and their enforcement** to reflect the growing risk of overheating, especially for social housing.

2. Make green and blue space essential cooling infrastructure

- **Tree canopy and shade targets for all urban areas**, prioritising neighbourhoods with least green space and highest heat vulnerability.
- **Prioritise investment in accessible local green spaces**, which can provide local cooling close to where people live.
- **Require green and blue infrastructure in new housing and urban development**, including tree cover, green roofs, parks and water features.

3. Protect workers from extreme heat

- **Introduce a legal maximum workplace temperature**, with specific protections for workers particularly vulnerable to heat, including pregnant, disabled, perimenopausal and menopausal workers and those with existing health conditions.
- **Require employers in high-heat sectors to protect workers**, including through adequate cooling and ventilation, shaded rest areas and breaks, and adjustments to working hours to avoid the hottest parts of the day.
- **Ensure adaptation investment creates good-quality jobs**, while improving working conditions in sectors particularly exposed to heat, including the care economy.

4. Protect health through social care

- **Treat health, social care and childcare as essential climate adaptation infrastructure**, with investment prioritised in facilities and neighbourhoods most exposed to heat.
- **Introduce minimum cooling standards for hospitals and care homes**, with urgent retrofitting of facilities in high-heat neighbourhoods.
- **Build heat preparedness into individual care planning** for older adults, disabled people and those with chronic illness.
- **Expand heat risk assessments beyond clinical diagnosis to include socioeconomic conditions** in which people live and work, such as housing quality, income, and social isolation.
- **Routinely publish sex and gender-disaggregated heat mortality data**, so the gendered impacts of heatwaves are visible and can inform policy.

5. Put community power at the heart of adaptation

- **Give women and affected communities a meaningful role in shaping national and local adaptation plans**, recognising their lived expertise about how heat affects their lives.
- **Provide sustained and targeted funding for community organisations to build local climate resilience**, using trusted relationships and local knowledge to support outreach, preparedness and locally led solutions.^[227]
- **Prioritise adaptation investment in communities facing the greatest environmental inequalities**, rather than expecting those with the fewest resources to fund their own adaptation.

6. Ensure heat alerts and emergency support reach those most at risk

- **Make national heatwave communication much more visible**, with clear national leadership and messaging reaching the most exposed communities through GPs, community organisations, social services and multilingual and accessible formats.
- **Use heat-health alerts to trigger proactive support**, including outreach and accessible cooling spaces in areas with the greatest heat vulnerability, rather than relying on individuals to act on warnings themselves.
- **Develop trusted routes to reach people who may otherwise be missed**, including socially isolated people and women experiencing domestic abuse.
- **Require every local authority to have a funded heat-health action plan**, identifying the people and neighbourhoods most at risk and setting out how they will be supported.
- **Provide emergency financial support during heatwaves for people on low incomes**, including consideration of automatic payments through the social security system to help meet additional cooling and other heat-related costs.

7. Address the wider impacts of extreme heat

- **Ensure heatwave planning considers the wider economic and social consequences of extreme heat**, including rising food and energy costs, transport disruption and additional pressure on health, social care and other essential public services.
- **Integrate air-quality monitoring and pollution reduction into heatwave response plans**, prioritising areas where low-income and racialised and marginalised communities face compounded exposure.
- **Recognise the interaction between different climate risks**, including heat, drought, wildfires, food insecurity and air pollution, rather than addressing each in isolation.

8. Protect pregnant women and babies

The Birth Companions Institute has developed the following recommendations, building on recent calls from the Wellcome Trust,^[228] the Climate Change Committee^[229] and the Physiological Society.^[230]

- **Review all heat guidance and policy through the lens of pregnancy.** Government should urgently review public guidance, clinical advice and policy frameworks on extreme heat to identify inconsistencies and gaps affecting pregnant women, supported by a standardised approach to recognising heat vulnerability.

- **Explicitly recognise pregnant women and babies in national heat-health alerts.** The UKHSA Heat-Health Alert system and Adverse Weather and Health Plan should explicitly identify pregnant women and babies as groups requiring particular protection, with tailored advice and consideration of whether existing alert thresholds adequately reflect pregnancy-related risks.
- **Develop NICE guidance on heat and pregnancy.** NICE should develop evidence-based clinical guidance addressing heat risk during pregnancy and early childhood, giving frontline clinicians a clear framework for prevention, advice and care.
- **Climate-proof maternity and neonatal care.** Dedicated investment should ensure maternity and neonatal settings can maintain safe temperatures, prioritising older and overheating buildings. Maternity wards and neonatal units should be included in NHS estate overheating assessments, with published plans and timescales for addressing risks. New facilities should meet appropriate thermal safety standards.
- **Record heat exposure in maternal and infant health reviews.** MBRRACE-UK and local maternity review panels should be required to record and report on heat exposure as a contributing factor in preterm birth, stillbirth, maternal death and neonatal death. Without systematic data collection, the scale of heat-related harm in the UK remains invisible.
- **Do not hold pregnant women or babies in unsafe, overheating institutional environments.** A specific legal duty should require that no pregnant woman or baby be housed in any institutional setting that cannot maintain a safe temperature, covering prisons, immigration removal centres, Mother and Baby Units, Parental Assessment Units, and any other setting where women are held in the care or custody of the state. This should be enforceable, with clear remedies including transfer to suitable accommodation. In the meantime, HMPPS, the Home Office and relevant bodies should introduce mandatory, legally enforceable, pregnancy-specific heat safety plans across these settings, developed with clinical experts and women with lived experience, and subject to independent inspection. This does not resolve the deeper problem: these settings were never designed to safely hold pregnant women, and the Birth Companions Institute continues to call for an end to their imprisonment during the first 1,001 days.
- **Provide cooling support for pregnant women and babies in insecure housing.** Pregnant women and families with babies who cannot keep their homes safely cool should be able to access emergency cooling equipment and, where necessary, alternative accommodation during periods of extreme heat. Particular priority should be given to women experiencing poverty and financial insecurity, those living in temporary accommodation and those with no recourse to public funds.
- **Protect pregnant women at work.** A legal maximum workplace temperature, applying to indoor and outdoor work, would provide greater protection for pregnant women, particularly those in insecure, low-paid or physically demanding jobs who have the least ability to reduce their own heat exposure.

What Feminist Heat Adaptation Looks Like

What Good Can Look Like

Feminist, equitable approaches to heat adaptation are not theoretical — they are already being implemented, and they work. The question is not whether the UK can do this. It is whether policymakers will choose to.

As we are constantly notified with news updates about records being broken, wildfires raging across Europe, and the visible damage caused by extreme heat, it is easy to feel disheartened. Instead of despair we must ask ourselves: What does a world where women, communities, and the planet flourish because our society is equitable, collaborative, and caring look like? And what would a feminist heat-resilient UK look like? We must engage in the practice of radical imagination and visualise an alternative future, and take this imagination beyond an idealistic dream and into a tangible world that is worth creating.

In a feminist heat-resilient UK, streets are shaded by trees, homes have been properly retrofitted to offer genuine shelter from the heat, and hospitals, care homes and workplaces stay cool when it matters most. Those with caring responsibilities are financially supported, green spaces are present in every neighbourhood and accessible regardless of one's mobility. The women described throughout this paper - the older women living alone, the pregnant care workers, the disabled women in social housing - are not left to cope alone. Their experiences shape policy, rather than being invisible to it.

The task ahead, while urgent, is not undoable. It requires vision, funding, and the political will to centre those who are most affected. The UK does not have to reinvent the wheel. Feminist approaches to adaptation, and heat resilience in particular, already exist throughout the world. And research shows that countries with greater gender equality have a higher ability to adapt to climate change.^[231] Yet consideration of women's health and welfare in national adaptation plans worldwide remains limited, with 43 countries having no mention of women or gender whatsoever.^[232] The UK is not alone in this failure, but it has the opportunity to lead.

Case Study: Vienna's gender-sensitive urban planning

The City of Vienna started integrating gender mainstreaming into urban planning in 2000,^[233] with the goal of meeting the needs and demands of all citizens. Streets, parks, public transport and housing are designed with the understanding that women use public space differently than men (e.g. being more likely to make multi-stop journeys and rely on public transport and walking due to caring responsibilities). On top of gender, the approach considers social, ethnic and health-related perspectives, aiming to better meet the needs of all citizens.

In the UK, this could look like embedding gender and equality impact assessments into all urban planning and housing decisions to ensure that public space, cooling infrastructure and public transport are designed around the lives of those who depend on them most.

Case Study: Barcelona's heat resilience work

In 2019, Barcelona launched its Climate Shelter Network, a system of over 350 publicly accessible spaces, including libraries, civic centres and markets, equipped to provide relief during extreme heat and cold.^[234] The city council set a target to ensure that by 2030, all residents have a climate shelter within a five-minute walk of their home. The network was designed to ensure that people without air conditioning at home have somewhere to go.

In the UK, this could look like a nationally funded network of cooling centres in every local authority, prioritising the neighbourhoods with the hottest homes, limited green space and high heat vulnerability and actively reaching out to those least likely to seek help themselves.

Case Study: Paris' Urban Greening

Paris has undergone a transformation in its approach to public space, driven by a shift away from car-centric planning. The city created green spaces that support biodiversity and filter air pollution and in doing so worked to reduce the urban heat island effect. Paris has seen a 40% reduction in air pollution over the past decade.^[235]

In the UK, this could look like mandatory urban greening requirements in all new developments, tree canopy targets for every local authority with a focus on the most deprived neighbourhoods, and investment in green infrastructure as a public health intervention.

In Paris, differences in heat exposure remain, largely reflecting the age of buildings.^[236] In Barcelona, a mobility justice lens shows that climate shelters become less accessible when mobility is taken into account.^[237] They do not map directly onto the UK context, but can be modified to fit the UK context.



A feminist approach to heat adaptation is about more than surviving a hotter future. It is about building one that is fairer, healthier and more resilient for everyone.

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