BRIEFING: The impact of extreme heat on patients

Background

The UK is experiencing more frequent, more intense and longer-lasting periods of extreme heat as a result of climate change[1]. Figures from the UK Health Security Agency (UKHSA) show that nearly 3,000 heat-associated deaths occurred during hot weather in May and June 2026 alone - equivalent to the population of a small rural town - and this year is provisionally on course to see the highest number of heat-associated deaths on record.

The Health Secretary, Yvette Cooper, has said that the NHS needs to plan for extreme heat on a par with the planning that is already in place for winter pressures. In May 2026, the Government's statutory adviser, the Climate Change Committee (CCC), called for all hospitals and care homes to have air conditioning within the next decade, and advised the Government to plan for at least 2°C of global heating by 2050. A global study published in The Lancet Planetary Health in August 2026 set out updated projections for the point at which human heat tolerance is exceeded and highlighted the disproportionate impact on people aged over 60.

Much of the NHS and social care estate is decades old and already in need of repair, and is poorly adapted to extreme heat, whether through a lack of ventilation and air conditioning, ageing buildings that retain heat, or engineering infrastructure (incl. electrical capacity, ductwork and mechanical systems) that cannot support additional cooling equipment. This leaves both the people who work in and the people who use health and care services exposed to the health risks of extreme heat.

In August 2026, the RCN published testimony from nursing staff describing the impact of extreme heat on their ability to work safely, with members reporting temperatures of over 30°C on wards, staff collapsing on shift, and equipment and medicines having to be moved to protect them from the heat. That intervention focused on the impact on the workforce. This briefing accompanies the second phase of that work: a survey of RCN members exploring the impact of extreme heat on the patients, service users and clients they care for.

The findings set out below show that this is not only a workforce issue. Nursing staff report very little confidence that government is doing enough to address the health impacts of climate change, and describe wide-ranging harm to patients and service users in their care over the summer. This includes cancelled surgery and delayed discharge, increased stress, and, in the most severe cases, reports of increased mortality among the most vulnerable.

About the survey

Following anecdotal feedback that this summer's heatwaves were particularly challenging in Wales and England, we surveyed our RCN membership in these two nations. We asked about the impact of extreme heat on members' ability to provide care and the impact of the heat on the people they care for. The survey was live between 13-28 August 2026.

While we received a very small number of insightful responses from members in Northern Ireland and Scotland (below 15 in total), these have been excluded for the purpose of this briefing to ensure the results wholly reflect Wales and England. In total, 2,471 respondents

[1] Note: definitions of 'heatwaves' and 'extreme weather' may vary between countries

participated in the survey (Wales, 189 and England, 2,282), and this sample has been analysed together for this briefing and accompanying media and communications activity.

The short anonymous survey included some questions on role, work setting, region, two quantitative questions on confidence in Government actions to tackle climate change, and two free-text questions asked respondents to share their experiences of working and providing care during periods of hot weather (see Appendix). The qualitative responses were reviewed to identify recurring themes and issues, which are presented below, with select quotes used to help illustrate points.

Key findings

Background of survey respondents (base 2,471): the majority work for the NHS (2,167, 88%). In terms of profession, most are registered nurses (2,214, 90%) while the remainder are other nursing professionals (233, 9%), or other health care professional (24, 1%).

Around three-quarters (74%) of respondents reported little or no confidence in whether their '**Government is taking sufficient measures to reduce the impact of climate change upon health and care services**'.[2]

Similarly, two-thirds (66%) of respondents indicated a strong lack of confidence as to whether '**Government is taking sufficient measures to tackle the global climate crisis**'.[3,4]

We asked respondents to share their view on how the extreme heat over the summer has affected their ability to nurse effectively.

- Respondents described uncomfortably hot workplaces (some quoting temperatures above 30 or 35 degrees Celsius), particularly in relation to aging NHS estates with poor cooling (no/insufficient air conditioning or fans). While some respondents pointed out that fans are not allowed in some areas due to strict infection control policies.

  'The office in which I am based has underfloor heating which is always on. The windows do not open more than 10cm and it is like a greenhouse holding the heat on warm days…' (Registered nurse, NW England).

- Physical impacts on staff included fatigue, dizziness/fainting, headaches, feeling sick/vomiting, heat exhaustion/heat stroke symptoms, and dehydration. Cognitive/behavioural impacts included brain fog/difficulty concentrating, reduced decision-making, reduced productivity, and several mentions of increased chance of (including actual) errors. Such issues have been particularly difficult for nursing staff with underlying health conditions (such as menopause, epilepsy, diabetes, etc.) or pregnancy.

[2] Confidence levels are based on a 10-point scale (from 1 - strongly disagree to 10 - strongly agree). Respondents who selected the lowest values (1 to 3 inclusive) were grouped represent no/little confidence. A total of 1,289 respondents out of 1,735 (who chose to answer this question) selected a value falling into this grouping.
[3] The same approach used in footnote 1 was used for this question, with the calculation based on 883 out of 1,340 respondents choosing one of the lowest values.
[4] On both questions about confidence, sub group analysis at the nation level showed very little difference in views between respondents in Wales and England.

‘It’s a constant struggle to stay hydrated and keep your concentration sharp when you feel like you are working inside a sauna. Also, this heatwave has triggered severe migraines multiple times which left me off sick as I could barely get up without vomiting.’ (Registered nurse, London).

- There were issues around uncomfortable uniforms or personal protective equipment (PPE) not suited for the hot weather. Breaches in operation were also raised, such as fridge temperatures holding vaccines exceeding out of range limits, and concerns around drug effectiveness, overheating equipment, and cancelled theatre operations due to excessive temperatures.

  ‘We are monitoring the temperatures - it has been up to 40 degrees at the peak. Has been steadily over 30 degrees and we vaccinate in this room - we have had to beg to be given a larger cool bag to be able to keep the anaphylaxis pack in as well as vaccines.’ (Registered nurse, London).

- It has not just been staff in acute settings that have suffered. Stories included accounts of community nursing staff having to contend with long journeys in hot cars, a lack of access to public conveniences, and delivering care in homes with high temperatures.

- While there were a few stories of NHS trusts and managers trying to find solutions to help staff (such as providing bottles of water and ice popsicles), there were also many comments about staff raising issues that have simply been ignored.

  ‘…the Ward Managers in my group have been buying ice and doing cold drink rounds just to ensure that the staff keep hydrated. No senior management outside of the nursing teams have acknowledged or supported with this.’ (Registered nurse, West Midlands).

In terms of the impact of extreme hot weather on patients receiving care, survey respondents talked about:

- Interruptions to care because patients have either cancelled or simply did not turn up for appointments, but also postponement of care in some cases.

  ‘Patients have had their operation cancelled, they're struggling in PACU [post-anaesthetic care unit] to keep temperatures in safe ranges.’ (Registered nurses, Wales).

- Patients being cared for in overheated settings has led to high levels of discomfort, with patients sweating or overheating, experiencing trouble sleeping, suffering tiredness or losing their appetites.

  ‘I have been surprised they [patients] haven't complained more, probably feeling too ill to voice it. I have actually cried for them. It's inhumane.’. (Registered nurse, SE England).

  There were also mentions of patients fainting, collapsing or suffering dizziness:

‘I don’t interact with patients directly but I’ve spoken to GPs, Nurses and Health Care Professionals who have remarked on patients passing out from heat exhaustion in their GP Surgery.’ (Other healthcare professional, Northern England).

- Breathing problems were reported (including breathlessness particularly for those suffering long-term lung conditions), as well as low blood pressure and heart failure.

- Staying hydrated and accessing cold water was a major reported issue, resulting in additional IV fluids needed to be administered. This was seen to add to clinical workload of nursing staff to manage and monitor patients.

- Particularly in mental health settings, there were mentions of patients becoming more irritated, aggressive and violent in some cases. Others reported that some patients had become more confused, delirious, and distressed as a result of the hot weather.

  ‘Patients have felt dizzy, nauseous and unwell. One patient became rude and verbally aggressive as we couldn’t make it cool enough for him. Moved as many patients in to the day room overnight which did have air con but then privacy and dignity go out the window.’ (Registered nurse, SW England).

- Health issues are stated to have been made worse with the temperatures for specific groups of patients; older, frail, young, newborn, disabled, housebound, and those living with cognitive decline.

- Delayed patient recovery was also cited as an outcome of the heatwaves, with mentions of patients being less keen to engage in physiotherapy/rehabilitation efforts. There were also ample comments about how the heat was making existing conditions worse, leading to patient safety concerns. This included reports of increased mortality, blocked catheters and patients also pushing for early discharge because they had considered the wards too hot.

  ‘They [patients] are very tired, almost lifeless. Their sheets and gowns are wet with sweat. Pressure ulcers are breaking down due to sweat. Those that are able are saying it’s unbearable. They can’t sleep and can’t wait to be discharged.’ (Registered nurse, SE England).

Conclusion

Climate change is driving increased temperatures and more frequent heatwaves. Heat stress is a recognised cause of extreme weather-related death and can exacerbate underlying conditions including cardiovascular disease, diabetes, respiratory conditions and mental ill health, as well as increasing the risk of accidents. Vulnerability to heat is shaped by both physiological factors, such as age and existing health conditions, and by exposure factors, including the setting in which someone receives care. Heatwaves are also associated with increased psychological distress and can worsen the symptoms of existing mental health conditions.

Alongside direct physical health harms, extreme heat can disrupt continuity of care: warping and strain on ageing buildings, and pressure on electricity supply from cooling equipment, all pose risks to the safe running of services. Without a coordinated, centrally supported plan to

adapt the health and care estate, these risks to patients and the people who care for them will grow year on year.

These risks are no longer theoretical, and nurses are directly experiencing the effects of frequent extreme heat. Nursing staff report almost no confidence that government is taking sufficient action on climate change and its impacts on health and care. Their testimony describes tangible, wide-ranging harm to patients this summer and the absence of a coordinated adaptation plan is a present risk, not a future one, and patients as well as staff are bearing the cost of inaction.

Recommendations

Additional investment to adapt the health and care estate

- The RCN supports the Climate Change Committee's (CCC) call for governments to urgently invest in cooling particularly in critical settings such as hospitals and care homes.
- Heat adaptation must be treated and funded separately from heat decarbonisation across both the NHS and ASC.
- ***NHS (in England):***
    - The NHS Capital Guidance requires organisations to have plans for 'heat decarbonisation' as a condition of capital funding (incl. upgrading heating systems, insulation and ventilation). However, this must be extended at the guidance's annual refresh to require plans for heat resilience and adaptation (incl. cooling, shading and resilient electrical supply) to reflect local need and experiences, so that protecting patients and staff from extreme heat becomes a formal condition of capital sign off. It must be noted that one-size-fits-all standard will not suffice.
    - The Estates Safety Fund, and other sector equivalents should introduce a dedicated, named and separately reported heat-resilience category[5].
    - Funding for heat-related adaptation should therefore be scaled up substantially beyond the £32million so far identified for cooling and ventilation across 2026/27 to 2029/30, in line with the scale of patient harm set out in this briefing[6].
    - The NHS should use its position as a major buyer to negotiate down the cost of cooling equipment and adaptation works, rather than relying solely on a decentralised, trust-by-trust approach, which is likely to be slower and less cost-effective.

Protect patients as well as staff from extreme heat

[5] DHSC's own allocations release shows that funding for cooling and ventilation currently has to be reconstructed retrospectively through a keyword search of scheme descriptions rather than tracked as a distinct priority. Without a named category to bid under, some trust-level need may be going unbid for or folded into unrelated headings. This suggests the true scale of need is likely higher than current figures capture.
[6] The RCN welcomes the recent announcement by the Estates Safety Fund to allocate £32million to improve 'cooling and ventilation, helping hospitals cope with extreme heat as well as winter pressures'. However, this is an overall total, averaging out to £8million per year, despite the Estates Returns Information Collection's estimated cost to eradicate backlog maintenance in the NHS sitting at £15.9 billion in 2024/25. This represents the wider NHS maintenance backlog as a whole rather than the costed estimate of heat-resilience need specifically, but nonetheless a useful illustration of scale. The proposed funding amounts to only 0.2% of that overall backlog and is therefore woefully inadequate.

- The Climate Change Committee's call for all hospitals and care homes to have air conditioning within the next decade should be adopted as a formal Government commitment, with interim milestones. The RCN also supports the CCC's recommendation for setting maximum temperature regulations for workplaces.
- Employers should be required to carry out, publish and act on heat risk assessments that explicitly consider the impact on staff, patients, service users and clients including those who are older, pregnant, or living with conditions that increase vulnerability to heat[7]. Staff reps should be consulted and engaged within this process.

Data reporting and transparency

- The NHS and social care providers should be required to capture and report data on patient harm linked to extreme heat, including cases where care was delayed, disrupted or delivered in unsafe conditions because of high temperatures.
- All reported incidents that occur during heat episodes should be reviewed and assessed to determine if heat was a contributory or direct factor impacting patient safety and reported nationally to build more accurate and transparent evidence of the effect of heat in health and care services.
- This data (covering both patient harm and incident reviews) should be published and disaggregated by setting, and by patient age, condition and other relevant characteristics, to allow the impact on the most vulnerable groups to be tracked over time.

Wider climate adaptation and mitigation

- The Government should ensure the NHS Green Plan and trust/health board-level adaptation planning are directly linked to capital funding decisions, rather than remaining a separate paperwork requirement with no dedicated funding route to deliver them.
- The Government should continue to reduce emissions from health and care services in line with the New Hospital Programme's net zero commitments, recognising that mitigation and adaptation must be pursued together.

Additional recommendations for Wales

- The Welsh Government must ensure that health and care facilities are fit for a changing climate. Most hospital windows have been rightly fitted with restrictors so they cannot be opened very wide - urgent investment is needed in cooling and ventilation to protect staff and patients.
- The Welsh Government should recognise that climate change is a health issue, and we need urgent action to make the NHS in Wales more prepared for the increasingly extreme temperatures we are experiencing.

[7] The duty on employers under the Management of H&S at Work Regulations is to carry out risk assessments that considers the risk of extreme heat/weather and to consider thermal comfort. Risks to workers from extreme heat must be managed. In a healthcare setting this should consider workers and patients or members of the public. Where an organisation employs 5 or more, the risk assessment must be in writing (not published) and the employer has a duty to inform workers of the significant findings of the RA.

References

UK Health Security Agency (2026) Interim heat mortality monitoring report, England: May and June 2026. London: UKHSA.

Kong, Q. et al. (2026) 'Exceeding human heat tolerance in a warming, ageing world: a global projection modelling study', The Lancet Planetary Health, published online 17 August 2026.

Climate Change Committee (2026) A well-adapted UK. London: Climate Change Committee.

Climate Change Committee (2021) Independent Assessment of UK Climate Risk: Advice to Government for CCRA3. London: CCC.

NHS England (n.d.) Green plan guidance. Available at: www.england.nhs.uk

NHS England (n.d.) Delivering a net zero NHS. Available at: www.england.nhs.uk/greenernhs/a-net-zero-nhs/

Department of Health and Social Care (2026) Estates Safety Fund: 2025 to 2026. London: DHSC.

Department of Health and Social Care (2026) Estates Safety Fund: initial schemes and associated funding allocations, 2026 to 2030. London: DHSC. Published 11 September 2026.

NHS England (2025) Estates Returns Information Collection (ERIC), summary page and dataset for 2024/25. Published 16 October 2025.

World Health Organization (2024) Climate change, heat and health. Geneva: WHO. Available at: www.who.int/news-room/fact-sheets/detail/climate-change-heat-and-health

Green Alliance (2024) Climate and health: protecting people in the UK from extreme heat. London: Green Alliance.

Green Alliance (2024) Rising to the mental health challenge of climate change. London: Green Alliance.

Royal College of Nursing (2019) RCN position statement on climate change. London: RCN.

Royal College of Nursing (2026) RCN says extreme heat making NHS 'impossible environment' as nursing staff collapse in workplaces 'not fit for humans'. Press release, 13 August 2026.

Appendix: survey questions

- Q1. Which country/region do you work in?
- Q2. Do you work in the NHS?
- Q3. Are you a registered nurse or other nursing professional?
- Q4. How, if at all, has the extreme heat this summer affected your ability to nurse effectively? What are the challenges you're facing?
- Q5. How, if at all, has the heat impacted your patients?
- Q6. To what extent do you agree with the following statement: I have confidence that my Government is taking sufficient measures to reduce the impact of climate change upon health and care services (1 being strongly disagree and 10 being strongly agree).
- Q7. To what extent do you agree with the following statement: I have confidence that my Government is taking sufficient measures to tackle the global climate crisis (1 being strongly disagree and 10 being strongly agree).