

A Tale of Three Hot Cities:

Comparing Extreme Heat Policy and Health Outcomes Across Phoenix, New Orleans, and Boston



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Executive Summary

Often referred to as the “silent killer,” extreme heat is the number one cause of deaths nationally and globally from any weather-related event, more so than hurricanes and tornadoes combined.¹ With the impacts of extreme heat being more deadly but less visible than storm or wind damage, heat-related illnesses and deaths can often be masked as cardiovascular events, kidney failure, mental health distress, and more, giving heat its “silent killer” name. **Extreme heat policymaking and action, across both short-term heat emergencies and long-term heat response, must be carefully designed to address positive health outcomes and greater quality of life for all, especially frontline residents.** Ensuring that heat policies are grounded in health needs, tailored to minimize exposure to heat and improve adaptive capacity (or the ability of frontline populations to access cooling interventions and be resilient to hotter and longer heat waves) will be critical for city resilience in the face of a changing climate, which requires a coordinated and collaborative approach across government agencies and multi-sector partners.

Phoenix, New Orleans, and Boston all have unique experiences with the impacts of extreme heat. In analyzing the three cities’ urban heat actions and policymaking, however, there are several commonalities between them:

- **Many current heat actions and policies address heat citywide for all heat frontline populations.**
 - While there can be a benefit to addressing heat citywide across populations and neighborhoods in ensuring that no one is left behind, future heat policy efforts could further strengthen equitable and effective implementation by prioritizing cities’ most vulnerable residents and workers, who are hit hardest and first by extreme heat.
- **Policies often prioritize short-term heat emergency response.**
 - Cities should also prioritize short-term long-term heat resilience strategies, leveraging public-private partnerships for the implementation of heat solutions.
- **Many policies impacting heat frontline populations are embedded in cross-climate hazard policies and action.** (*Examples include: heat as a facet of addressing drought, disaster recovery, and extreme temperatures interventions*)
 - Alongside tailoring solutions to meet the needs of frontline populations, cities must also address systemic risks to critical infrastructure.

Cities should aim to share best practices across jurisdictions to support more effective heat action and policymaking and to help protect frontline neighborhoods and infrastructure from extreme heat over time.

¹ <https://www.nature.com/articles/s43247-026-03804-5>;

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(25\)01919-1/abstract](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(25)01919-1/abstract)

Heat Policy Scan: Key Takeaways

1

Phoenix, New Orleans, and Boston are all actively addressing extreme heat, tailored to their unique experiences and needs.

All three cities are addressing the increasing impacts of heat according to their local context, including geography-specific cross-climate hazards like severe drought in Phoenix, hurricanes and disaster recovery in New Orleans, and extreme temperatures during both summer and winter in Boston.

2

Heat policies should be tailored to heat-vulnerable populations.

While most extreme heat policies emphasize frontline populations, if those populations are not named in heat policy language (e.g. unhoused populations), then equitable and effective implementation can be challenging to track.

3

Heat policies must focus on systemic risks.

Most extreme heat policies emphasize people-centered interventions to benefit all frontline populations citywide, but may neglect heat's systemic risks to critical infrastructure (e.g., power grid, transportation infrastructure, hospitals and community health centers).

4

Heat policymaking must focus on both short-term heat emergency response and long-term heat resilience.

Many heat resilience policies focus on short-term heat emergency response, and could benefit from opportunities to also focus on policies that build long-term heat resilience via policies that promote cooler buildings/built environment, cooler neighborhoods, cooler workplaces, cooler commutes, etc.

5

Heat interventions should leverage and encourage public-private partnerships.

Public-private partnerships can be catalytic for community-based heat resilience, and can help to move the needle on implementation when government entities may be limited in funding, staff capacity, and enforcement capabilities. Public-private partnerships can also help to uplift and empower community partners as heat leaders.

The Community Adaptations to City Heat (CATCH) Project: Heat and Health Policy

In 2025, the Community Adaptations to City Heat (CATCH) project was formed, a 3-year research project funded by the U.K.-based Wellcome Trust and led by Dr. Patricia Fabián at the Boston University School of Public Health, to research extreme heat policy and public health across Phoenix, New Orleans, and Boston. A multi-sector team comprising of Boston University researchers and community and non-profit partners like iSeeChange, Dialogue Earth, and A Better City, the CATCH project hopes to bring more awareness to the connections between heat policymaking and public health outcomes, and to understand how cities approach heat resilience policy.

Why These Three Cities?



Phoenix, Arizona

This southwestern city is accustomed to hot, dry, and cumulatively higher temperatures than much of the United States. In 2025, Phoenix experienced 37 days above 110 degrees F and 122 days above 100 degrees F (the city's second-hottest year on record),² and March 2026 broke records for an all-time March high temperature of 106 degrees F.³ With local records estimating extreme heat deaths of around 400-600 people per year, Phoenix heat-vulnerable populations include people who are unhoused, outdoor workers, and residents who are low-income and do not have the ability to pay for air conditioning.



New Orleans, Louisiana

This southern coastal city has a hot, humid climate, with key cross-climate hazards including hurricanes and environmental disaster-related power failures. Like Phoenix, heat-vulnerable populations in New Orleans include people who cannot afford air conditioning, unhoused populations, and outdoor workers, among others. Heat policy in New Orleans necessitates solutions at the intersection of disaster recovery and energy resilience.



Boston, Massachusetts

This northeastern city is typically known for its colder climate but is one of the fastest warming regions in the country. With critical infrastructure and buildings that typically retain heat rather than protect those inside from it, and with a culture unaccustomed to heat and without ubiquitous air conditioning, extreme heat in Boston is deceptively dangerous.

As part of the CATCH policy team's research, an Urban Heat Action and Policy Database was developed to analyze existing policies, protocols, and initiatives across Phoenix, New Orleans, and Boston. The CATCH policy team's approach to the Database views extreme heat vulnerability through the lenses of heat exposure, heat sensitivity, and adaptive capacity, and contextualizes potential adaptation initiatives to the local heat context. Although this Database initially focuses on Phoenix, New Orleans, and Boston, expansions are underway to include other cities with unique heat-relevant circumstances and populations across the United States and, in the future, to cities across the Global South. The goal of this work is to help make heat actions, policies and interventions more visible, accessible, and effective, and to help share knowledge and lessons learned across jurisdictions.

² <https://www.nature.com/articles/s43247-026-03804-5>;

³ [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(25\)01919-1/abstract](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(25)01919-1/abstract)

Takeaways from an Urban Heat Policy Database of Three Frontline Communities: Exploring Heat Policies and Action in Phoenix, New Orleans, and Boston

When it comes to addressing key heat vulnerabilities, each city has made substantial progress in heat policymaking that helps to protect all heat-vulnerable populations citywide. Given that specific heat-vulnerable target populations or neighborhoods were overwhelmingly not named in policy, it was unclear to what extent heat plans and policies were being implemented equitably.

Implementation

The degree of efficacy or on the ground implementation of heat-related policies is difficult to understand through publicly available information, especially as funding sources have been impacted by federal funding cuts. In addition, not all policies have mandated requirements, and therefore it is difficult to know which plans and policies have actually been put into action. **Without naming a clear governing and enforcing agency, funding, and staff capacity attached to heat policy compliance, heat policies are less effective on the ground than they are on paper.** For the purposes of this analysis, the team focused on publicly available information on heat action plans and policies and deemed evaluation of implementation to be out of scope.



Greening near Downtown Crossing, Boston.
Photo: Madilyn Sandy (2026)

Terminology

The same terminology used in heat-relevant policies carried different meanings by city, for example “heat mitigation” or “hazard mitigation” encompassed all heat work in New Orleans, however in Boston, generally climate mitigation referred specifically to greenhouse gas emissions reduction.



Street maintenance work in hot sun in Boston.
Photo: Madilyn Sandy (2026)

Short vs. Long Term

The majority of extreme heat-related policies captured in the Database address protocols for short-term heat emergency response, or what to do in advance of and during high heat events, rather than long-term heat resilience. While both are needed, fewer policies focused on cooler buildings, commutes, and neighborhoods overall were found. **Across all three cities, low income households were in the top three heat-vulnerable populations targeted by heat policymaking, suggesting that income-related constraints like the ability to pay for air conditioning and lack of access to affordable cooling strategies are common heat challenges.** Outdoor workers were also a key frontline population targeted by heat policy interventions in the three cities, alongside unhoused populations.

Public-Private and Multi-Sector Partnerships

To help accelerate heat solutions, public-private partnerships for heat resilience can be catalytic in driving effective, equitable implementation of heat policies, including Phoenix/Maricopa County’s [Heat Relief Network](#), New Orleans’ [Community Lighthouse Project](#), and [Boston’s Clean Power Prescription Program](#). Multi-sector partnerships can also be impactful in improving heat-relevant data and research. Phoenix benefits from a strong connection to [Arizona State University’s Heat Preparedness Center](#), Boston benefits from partnerships with Boston University and other academic institutions, and while New Orleans could benefit from increased academic partnerships, it already leverages community-driven citizen science for heat resilience through groups like iSeeChange.

Heat Emergency Protocols

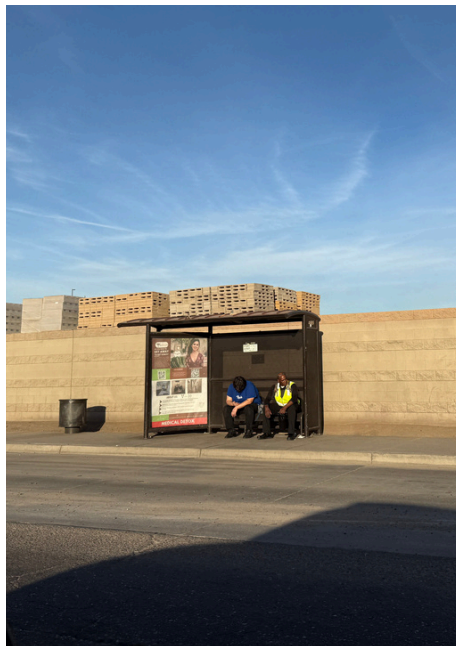
When it comes to heat emergency protocols, in New Orleans and Phoenix heat policies like emergency shutoff protections are based on the hottest months in the calendar year, typically lasting from May through October. In Boston, extreme temperatures in both summer and winter months make calendar-based policies challenging, given that it could lead to the majority of the year being deemed a shutoff protection period. Instead, for summertime, Boston's heat emergency protocols are temperature threshold-based, meaning they go into effect when the National Weather Service forecasts extreme heat above a certain temperature threshold (95 degrees F for two or more days when nighttime temperatures do not fall below 75 degrees F, although Boston's heat emergency threshold is currently under review).

Unique Approaches to Heat Leadership

Extreme heat policies are also reflective of unique city experiences with extreme heat. For heat governance, Boston's holistic Office of Climate Resilience approach is reflected in citywide heat policies benefitting all neighborhoods and heat vulnerable populations in Boston,⁴ with co-benefits across heat and other climate hazards. Phoenix's heat work is more targeted to heat specifically, and likely benefits from the elevation of the issue with a state-level Chief Heat Officer. In New Orleans, heat work falls within the Hazard Mitigation Office, encouraging solutions with benefits across heat and other geography-specific hazards like hurricanes. City-based policies are also often limited in scope of authority and geographic jurisdiction. For example, while New Orleans benefits from a Home Rule petition that enables New Orleans' City Council to govern local utilities, Boston's utilities are governed at the state-level by the Department of Public Utilities, meaning that City agencies are limited in authority and jurisdiction.



People escaping the sun in downtown Boston.
Photo: Madilyn Sandy (2026)



Bus stop exposed to hot Phoenix sun.
Photo: Patricia Fabian (2026)



Outdoor worker covering himself from heat in New Orleans while watering tree.
Photo: Julia Pearl Schwartz (2025)

Conclusions

Many policies influence heat vulnerability but are not explicitly framed as heat policies. Housing programs, safety-net programs, energy affordability initiatives, and utility protections are just some of the mechanisms that could reduce heat-related health risks despite not being developed as heat interventions, since they benefit heat frontline populations that experience multiple life challenges at once. This analysis underscores how direct and indirect heat policies, interventions, and action plans must be considered in municipal actions affecting heat resilience for frontline populations.

⁴ Note that Massachusetts appointed a Heat Resilience Officer statewide in August 2026; future work may examine to what extent Massachusetts' heat policies shift as a result of this new governance role.

CATCH Policy Recommendations for Extreme Heat

- 1 Focus heat policy interventions on frontline populations with detailed enforcement mechanisms.**
Heat policy interventions could benefit from targeting specific heat vulnerable populations (ex. unhoused populations, outdoor workers, low-income populations, children, etc.), with clear governance agencies named for implementation and enforcement considerations included. Funding needs and heat-related datasets will also be important to identify for policy implementation.
- 2 Focus on short- and long-term strategies simultaneously.**
Cities must consider both short-term heat emergency response protocols alongside longer-term heat resilience policies that create cooler buildings, commutes, neighborhoods, and communities overtime.
- 3 Integrate heat policies with non-heat climate hazards.**
Heat policies should prioritize co-benefits across non-heat climate hazards (ex. extreme precipitation, coastal flooding, hurricanes, air quality, drought, and disaster recovery), whenever possible.
- 4 Partner with community-based organizations for maximum impact.**
Heat policy interventions should be designed to meet heat vulnerable communities where they are at, in trusted neighborhood spaces like New Orleans' Community Lighthouses in local faith-based institutions and community-based organizations. Community-based partners must be empowered as partners and leaders in this work, to effectively reach heat vulnerable populations.
- 5 Leverage multi-sector partnerships to support optimal implementation.**
Multi-sector partnerships should be leveraged to augment city heat policy interventions and to help move heat policymaking from planning and design to implementation.

Learn More

In addition to expanding this research to additional jurisdictions, future work both within and beyond the CATCH team will dive deeper into evaluation of effective heat policy implementation and monitoring of success over time. For more information on the CATCH project and related work, please visit the project website: <https://www.catchcityheat.org/> and/or reach out to us at cityheat@bu.edu.

Appendix A: CATCH Policy Database: City by City Comparison

	Boston	New Orleans	Phoenix
Relevant Governance Agencies	Office of Climate Resilience, Office of Emergency Mgmt.	Hazard Mitigation Office (part of NOLA Office of Homeland Security & Emergency Preparedness)	Office of Heat Response and Mitigation (city), Maricopa County Heat Relief Network (regional)
State Chief Heat Officer	Yes: Katie Schlick, appointed as MA Heat Resilience Officer in August 2026	No	Yes: Dr. Eugene Livar, appointed in 2024 as Arizona's first-ever statewide CHO
City Heat/Climate Resilience and Hazards Officer	Yes: Brian Swett, Chief Climate Officer (appointed in 2024)	No: responsibilities distributed across departments in 2026	Yes: David Hondula, Director of Heat Response and Mitigation (appointed in 2024)
Heat Plan	Yes (2022)	In progress (as of 2026)	Yes (2023, with annual plan updates for 2024, 2025, and 2026)
Emergency Shutoff Protection During Extreme Heat	No (language pending before Legislature as of July 2026)	Yes	Yes
Heat Worker Protections	Yes (City Council Ordinance passed 2025)	Yes (City Council passed in 2025)	Yes (Heat Ordinance, 2024)
Indoor Temperature Ordinance	No	Yes (2022)	Yes (Phoenix city code, Chapter 39-5; 2024)
Urban Forestry Plan	Yes (20-Year Urban Forest Plan, 2022)	Yes (2023)	Yes (Shade Plan)
Tree Protection Ordinance	No (failed before City Council)	Yes (in progress as of 2024)	Yes (both public and private trees; 2021)
Shade at Bus Stops	Yes (30 green roof bus shelter pilot, 2024)	Yes (Better Bus Stops Project)	Yes (Shade Plan)
Community Resilience Hubs	In progress	Yes (Community Lighthouse Project, beginning in 2022)	Yes (24/7 Cooling Center established in 2025; shelter provided via Maricopa County Heat Relief Network)
Green Infrastructure	Yes (Office of Green Infrastructure; PowerCorps urban forestry)	Yes (green infrastructure manual in progress)	Yes (Green Stormwater Infrastructure; urban forestry also included as part of Shade Plan)
Financial Support for Heat-Related Energy Bills	Yes	Yes	Yes



Funded by: **wellcome**

Urban Heat Action & Policy Database



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