

IN FOCUS

Updated January 2, 2025

Emergency Federal Assistance for Extreme Heat: An Overview

Introduction

In recent years, parts of the United States have experienced a record number of episodes of extreme heat. The National Aeronautics and Space Administration (NASA) had previously reported that the summer of 2023 was the hottest summer—and 2023 the hottest year—recorded. Summer 2024 has since surpassed this record, and the agency reported that August 2024 was the hottest month on record (global records began in 1880). Government authorities and scientific organizations expect the United States to experience extreme heat episodes of greater frequency, duration, and intensity due to climate change, among other factors, with the International Panel on Climate Change reporting that "it is *virtually* certain that hot extremes (including heatwaves) have become more frequent and more intense across most land regions since the 1950s."

In the past several years, the executive branch has taken actions to respond to the threat that extreme heat poses to U.S. public health (see **Table 1**). Additionally, some Members of recent Congresses have introduced—but not passed—legislation to enhance certain federal authorities. Concerns persist that current federal and nonfederal resources and authorities are inadequate to protect against the risks of extreme heat. Congress faces a range of relevant questions, including what role the federal government should assume as communities prepare for and respond to extreme heat.

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Figure I. Extreme Heat in July, 2024

Source: NASA Earth Observatory Image, July 22, 2024.

Effects on Human Health

Many U.S. communities affected by extreme heat events report heat-related deaths, spikes in heat-related emergency room visits that overwhelm health care systems, and power supply strains, among other consequences. Socially vulnerable populations (including the elderly, children, pregnant women, unhoused persons, low-income individuals, and outdoor workers) face disproportionate risks.

Heat-related deaths in the U.S. are increasing. In 2022, the U.S. Centers for Disease Control and Prevention (CDC) reported that 3,066 heat-related deaths occurred between 2018 and 2020 (averaging 767 per year). In 2023, the agency reported that 1,600 heat-related deaths occurred in 2021 alone. Other estimates are higher; one study indicated that heat-related deaths have steadily increased since 1999, with the highest number (2,325) in 2023. Heat-related deaths linked to extreme heat, due to complications with diagnosis and reporting.

Emergency Response

Nonfederal Authorities and Efforts

The CDC and Environmental Protection Agency (EPA) identify several response measures that state, local, tribal, and territorial governments (SLTTs) and communities may undertake to protect residents and manage episodes of extreme heat, including

- developing heat health action plans;
- communicating risks to the public,
- suspending outdoor events;
- expanding medical surveillance of health effects;
- increasing emergency medical staff;
- outreach to vulnerable populations;
- providing emergency energy assistance; and
- opening cooling centers.

One study on local governments indicates that 66% of responding officials expect residents to face heat-related illnesses, and 44% expect a heat-related power outage this year. Further, 73% of respondents had implemented at least one extreme heat response or mitigation strategy. Some have appointed Chief Heat Officers responsible for overseeing extreme heat-related activities. Others have adopted emergency protocols for businesses, schools, and other facilities to protect individuals during extreme heat.

Gaps in Available Nonfederal Authorities

Despite some of the recent initiatives discussed above, most states do not have specific laws, standards, or plans addressing extreme heat. Identified gaps or disparities in relevant state and local emergency procedures and authorities include a lack of (1) emergency response plans for extreme heat, (2) identified office responsible for extreme heat emergency response, (3) insurance or other means to cover costs incurred, (4) focus on heat safety, literacy, and standards, and (5) consistent or coherent energy disconnection policies (e.g., shutoff for nonpayment) across state and local governments.

Federal Financial Assistance

Some federal agencies have programs and authorities that could potentially cover certain extreme heat preparedness and response costs incurred by SLTTs, eligible community organizations (e.g., nonprofit hospitals), and individuals, including

- Federal Emergency Management Agency (FEMA), which may provide grant funding to individuals as well as governments and nonprofits for emergency response pursuant to a declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act, as amended, P.L. 93-288). FEMA preparedness and mitigation grants may also provide assistance.
- The Administration for Children and Families operates the Low Income Home Energy Assistance Program (LIHEAP), a flexible block grant to states, tribes, and territories for operating home energy assistance programs for low-income households. Grantees may use funds to pay for heating and cooling costs, crisis assistance, weatherization assistance, and services to reduce the need for energy assistance. The Department of Health and Human Services (HHS) has established a LIHEAP and Heat Stress Geographic Information System Dashboard, which explains how LIHEAP can help with extreme heat.
- Other HHS components, including the CDC and Administration for Strategic Preparedness and Response (ASPR), administer several programs to assist SLTTs (and their public health departments) with preparedness and planning for health care systems.

See CRS Report R46873, *Emergency Response to Extreme Heat: Federal Financial Assistance and Considerations for Congress*, for additional sources.

Recent Federal Actions

Table I. Selected Relevant Federal Actions

Date	Summary of Action
June 2015	The National Oceanic and Atmospheric Administration (NOAA) and the CDC launched the National Integrated Heat Health Information System (NIHHIS).
July 2022	NIHHIS launched Heat.gov, with data and tools to communicate the risk of extreme heat.
July 2023	Launch of the White House Interagency Working Group (IWG) on Extreme Heat.
Aug. 2023	The Department of Homeland Security (DHS) releases Guidance for Emergency Managers on Extreme Temperatures.
April 2024	HHS launches Heat and Health Initiative, with resources on extreme heat risks.
June 2024	NIHHIS releases guidance on extreme heat response exercises and heat governance to help nonfederal governments prepare.

Date	Summary of Action
July 2024	NIHHIS and the White House IWG on Extreme Heat release the inaugural National Heat Strategy.
Sept. 2024	First White House Summit on Extreme Heat convenes representatives from federal agencies; the White House; the healthcare industry, and emergency management, as well as workers to discuss risks and strategies, and identify ways for nonfederal entities to prepare for, respond to, and mitigate the risks posed by extreme heat.

Source: Compiled by CRS.

Federal Authorities: Gaps and Options

Federal Role in Managing Extreme Heat

"Who is in charge of extreme heat?" is an ongoing question asked by emergency managers, government officials, and members of the public. The White House IWG on Extreme Heat and NIHHIS released a National Heat Strategy in August 2024, but it did not identify a lead agency for extreme heat response, or a threshold for federal involvement in emergency response. Congress may clarify how, if at all, the federal government should respond to extreme heat, and what situations warrant such assistance.

Stafford Act Declarations for Extreme Heat

Presidents have denied all past requests for Stafford Act declarations for extreme heat. Despite these denials, FEMA Administrator Deanne Criswell has affirmed that such a declaration is possible under current law. Congress could consider clarifying this issue. One example is legislation introduced in the 118th Congress (H.R. 3965/S. 4898), which would amend the Stafford Act to explicitly include extreme heat in its definition of major disaster.

Adapting Existing Programs for Extreme Heat

Federal assistance for extreme heat response is limited in scope and precedent. Yet some agencies appear to be adapting existing programs to the needs of extreme heat emergencies by modifying policies, guidance documents, and grantee communications. These adaptations may enhance nonfederal capacity to respond to extreme heat. Such actions could also divert resources away from the efforts for which these programs were originally designed or introduce competition for scarce funds. Additionally, grant programs designed for other hazards may not sufficiently address the particular threats extreme heat poses to human mortality. Congress may consider monitoring these program changes, and consider designing assistance specific to extreme heat.

Additional Resources

CRS Insight IN12250, Climate Change and Extreme Heat

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