

Categorizing Extreme Heat as 'Major Disaster' Under FEMA

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Case Studies

Extreme Heat is an intersectional environmental justice crisis.

1	Limitations with Cooling Centers
2	Strain on Healthcare Providers
3	Strain on K-12 Schools
4	Increased Energy Burden
5	Heat Related Power Outages
6	Exacerbation of Poor Indoor Air Quality

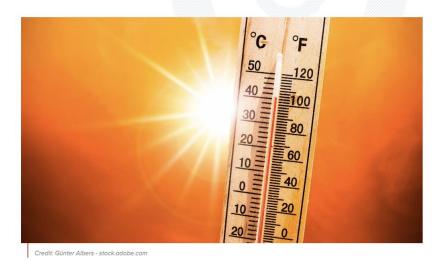


Limitations with Cooling Centers

COMMUNITY

City of Memphis cooling center opens at Hospitality Hub on Tuesday

Openings are available at local shelters for anyone who is in need of food or overnight sleeping accommodations.



- Cooling centers may not be accessible to everyone, especially those who are confined to (a) bed or have other physical and mental health challenges.
- Traveling to a cooling center can also increase core body temperature, especially if there is no air conditioning on public transportation or if the person has to walk in the heat.
 - NOTE: Due to budget cuts, MATA (Memphis' Public Transportation)
 has cut routes and temporarily suspended trolley services as of
 August 2024.
- With the increased housing crisis, people who are unhoused are the most at-risk and as cooling centers rely on certain temperature levels, the lack of access to reliant housing still poses great risk for this vulnerable population.

Strain on Healthcare Providers



Already this summer, Dr. Michelini said they've had about 20 patients come in with symptoms of heat-related illness. He says people in the Mid-South are at a heightened risk. "In this area of the country, we have very high humidity," he said. "The body's not able to cool itself down like it normally does through sweating."

Post-partum care is also more difficult during extreme heat waves.



Strain on K-12 Schools

Memphis school leaders grapple with school safety, air conditioning issues

By Marta W. Aldrich | August 20, 2024, 10:07pm CDT



Superintendent Marie Feagins, who was hired to lead Tennessee's largest district this spring, is dealing with a myriad of challenges as a new academic year begins for Memphis-Shelby County Schools. [(Ariel]. Cobbert for Chalkbeat)

- Health Risks for Students: Extreme heat can lead to heatrelated illnesses, affecting students' health and well-being, particularly those with pre-existing conditions.
- **Disruption of Learning:** High temperatures can impair concentration and cognitive function, resulting in decreased academic performance and engagement in the classroom.
- Increased Energy Costs: Schools may face higher energy expenses due to the need for air conditioning and cooling systems, straining budgets and diverting funds from educational resources.



Increased Energy Burden



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PRESS RELEASE | JULY 11, 2024

Nearly half of Memphis families face high energy burdens, according to new report

MEMPHIS, Tenn. — A new study shows that more than 48 percent of Memphians face high energy burdens, meaning a larger percent of their income goes to paying their power bill.

- The national average for energy burden is below four percent, but in Memphis, the median energy burden is 5.6 percent.
 - In some areas, including predominantly Black communities, the energy burdens are even higher.
 - South Memphis, for example, faces a median energy burden of seven percent.
- The report also showed that <u>30,000</u> Shelby County families are experiencing staggeringly severe energy burdens of more than <u>20 percent</u>, meaning a fifth of their income goes to their energy bills.



Heat Related Power Outages



- Increased Energy Demand: During heatwaves, the demand for air conditioning and cooling systems surges, straining the electrical grid and leading to outages.
- Equipment Overload: High temperatures can cause electrical equipment to overheat, resulting in failures or damage to transformers, power lines, and substations.
- Environmental Factors: Extreme heat can exacerbate issues like storms that damage power infrastructure, further contributing to outages.



Exacerbation of Poor Indoor Air Quality



- Airborne Pollutants: Window unit air conditioners can circulate dust, allergens, and pollutants trapped in the unit or surrounding areas, leading to poor indoor air quality.
- Humidity Issues: These units may not effectively remove humidity, creating a damp environment that fosters mold growth and increases the presence of airborne allergens.
- Inadequate Ventilation: Window units often lack proper ventilation systems, which can lead to a buildup of indoor air contaminants and reduce the flow of fresh outdoor air.

