Community Heat Interventions

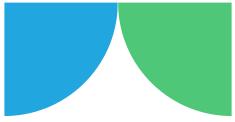
Nathaniel Matthews-Trigg, MPH, CEM, NMCEM

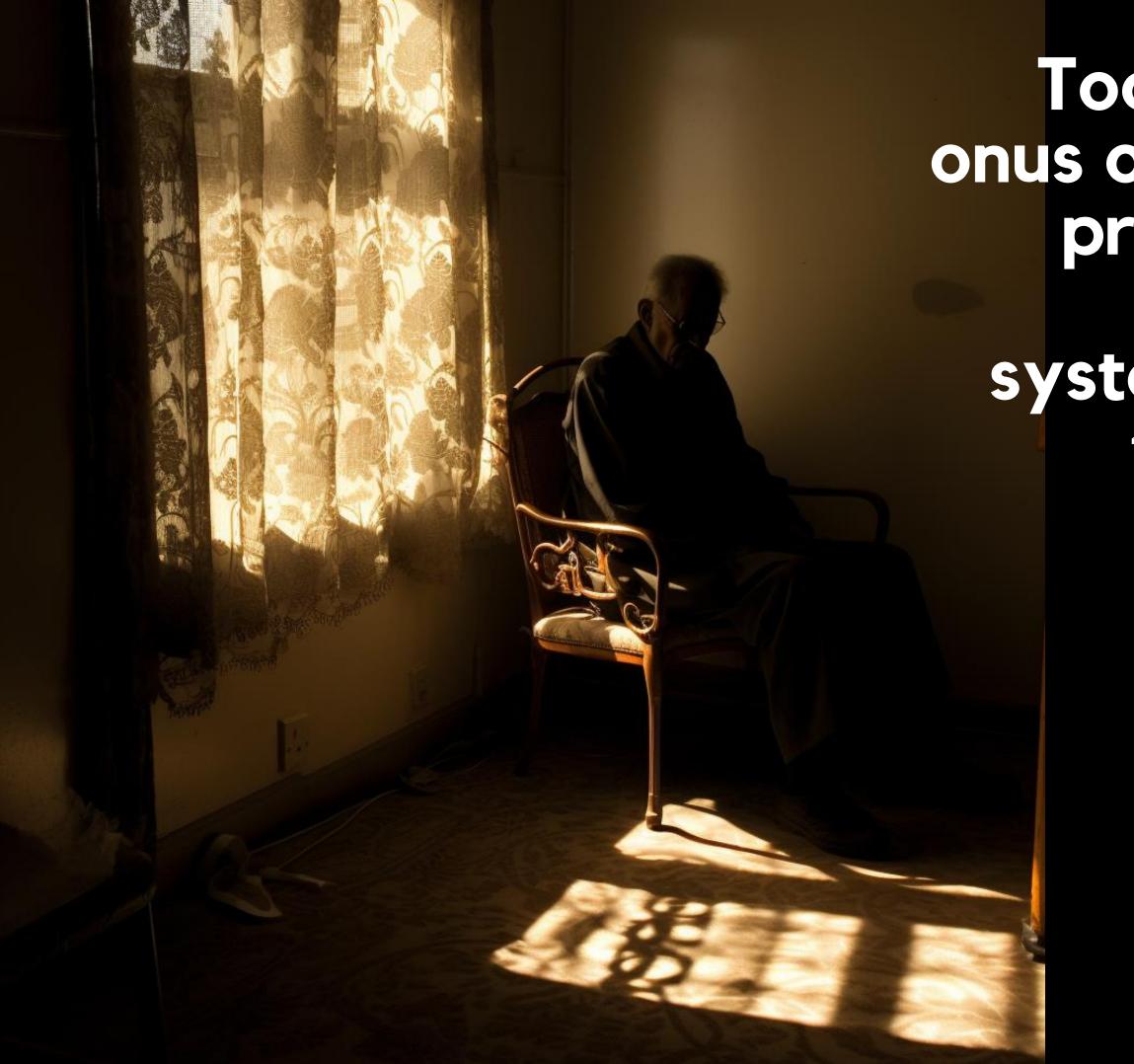
Board Member

Healthy Climate New Mexico

July 22, 2024







Too often we put the onus on the individual to protect their health, while ignoring the systemic barriers they face which create health disparities.

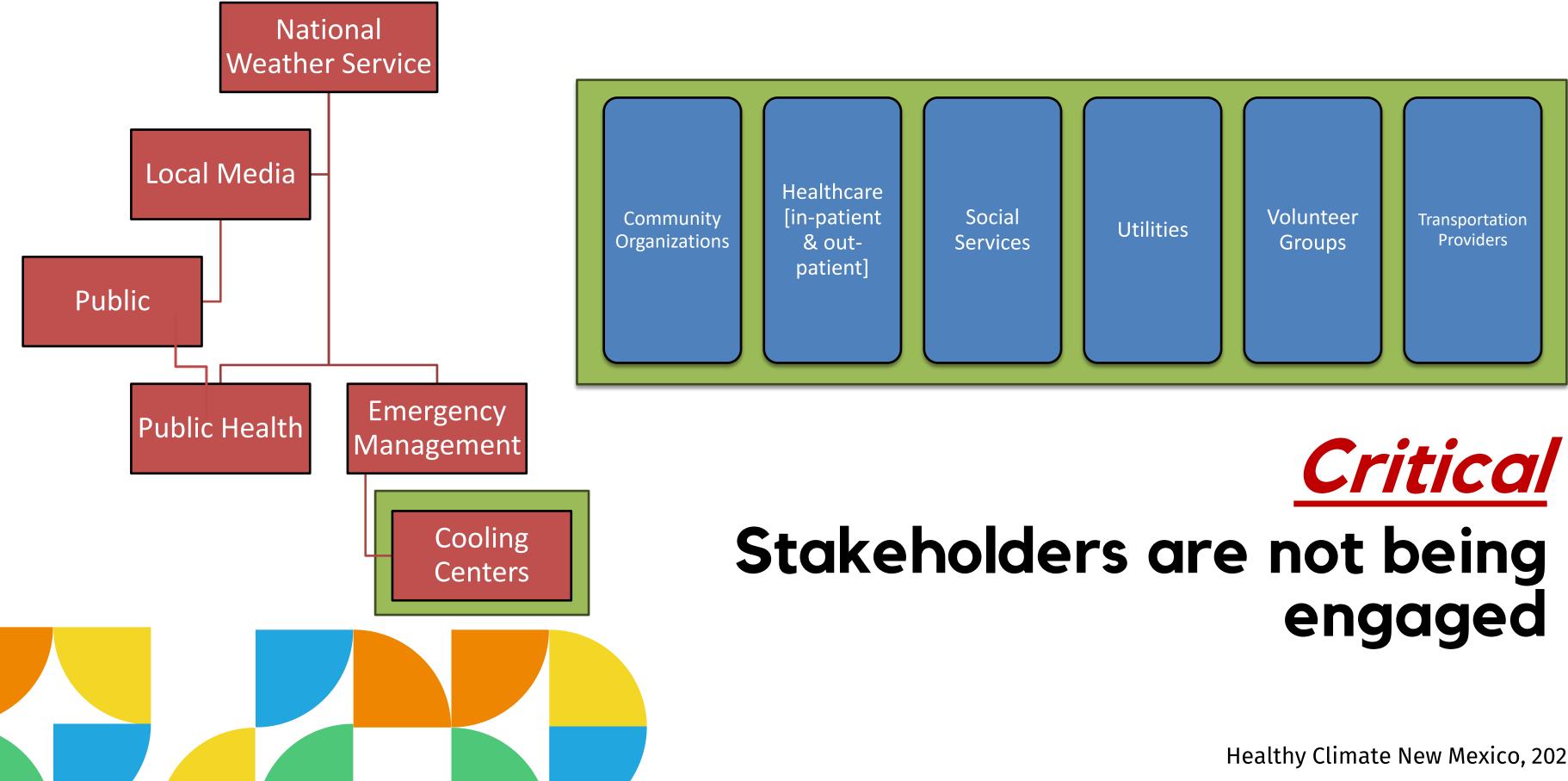
Vulnerable Populations & Barriers

- Socially Isolated
- Chronic Medical Conditions
- Workers
- Older Adults
- Children and teens
- Pregnant people
- Poor and marginalized
- Disability
- Substance Use



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Collaboration is *Critical*



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Examples:

Attachment A City of Phoenix Summer 2023 Heat Response Plan April 20, 2023





- at trailheads)

- lacksquaredistributed

Key program measures include: • 91 outreach shifts completed (75 street outreach, 16

• More than 4,000 engagements

• 305 Human Services Department referrals

250 hours of outreach contributed by 91 volunteers, including significant contributions from volunteer pools with APS and the Maricopa County Medical **Reserve Corps**

605 hours of outreach and 200 hours of planning and coordination by City staff, primarily from Volunteer Programs, Heat Response and Mitigation, **Finance, and Communications**

358 hours of service from an AmeriCorps Vista summer associate

More than 10,000 individual heat relief items

Informed by

- community input
- scientific evidence
- case studies

Need for climate and health infrastructure at the NM **Department of Health**



Policy Advisory - 2024 Heat Season **Healthy Climate New Mexico**

Summary

This policy advisory addresses the urgent need to confront the public health risks posed by extreme heat in New Mexico. As global average temperatures reach record highs, projections indicate an early onset of the heat season, with record-breaking daily temperatures already being experienced in much of the globe [1, 2, 3]. These conditions significantly increase health risks for people across the state. To mitigate these risks and ensure the safety and well-being of all New Mexicans this heat season, immediate and comprehensive action is required.

Key Recommendations

- data in a timely manner.

- that serve vulnerable populations.
- 7. about cost.
- symptoms.
- extreme heat risks and preventive measures.

Health Professionals for Climate Action

May 2024

1. Implement an evidence-based occupational heat standard to protect workers in high-risk occupations. 2. Improve public health surveillance systems to capture and analyze heat-related morbidity and mortality

3. Treat extreme heat as a mass casualty event, coordinating response efforts and ensuring appropriate emergency waivers and patient movement authority.

4. Enhance resilience against concurrent hazards such as electric grid failure and wildfires.

5. Provide safe, accessible, and culturally appropriate cooling centers, collaborating with organizations

6. Distribute cooling supplies to public entities and non-profit groups working with vulnerable groups. Stop utility shut-offs during extreme heat to ensure people can run cooling devices without concern

8. Establish a statewide heat hotline for heat-safety information and guidance on managing heat

9. Be proactive in messaging, disseminating clear, consistent, and culturally tailored information about

10. Implement a rural and tribal community cooling program, providing outreach and support for energy assistance programs and air conditioner distribution or loan programs.

Recommendation 1: Implement an Evidence-Based Occupational Heat Standard: Protect

workers by developing standards for high-risk occupations (outdoor workers and people working in inadequately cooled indoor spaces). These regulations should include a mandatory acclimatization process, rest breaks, access to hydration, shade, monitoring, and other evidence-based safety protocols. While this needs to be implemented via traditional occupational safety procedures, the process is too slow and unlikely to be accessible to save lives this summer. State leadership should consider ways that a heat-related emergency declaration could rapidly implement these life-saving measures. <u>Occupational heat</u> standards already exist in many states.

Recommendation 2. Improve Public Health Surveillance: Extreme heat morbidity and mortality surveillance systems are not (yet) adequate to provide critical information to assess and understand community risks at a detailed level, establish a baseline to track progress, or widely disseminate critical findings in a timely manner to those who can act to prevent injury. State officials need to provide the resources to modernize systems to capture and analyze heat-related morbidity and mortality in a timely manner. Morbidity and mortality data systems (hospital ED visits, death reporting, EMS calls, and other systems) need to be modernized to ensure interoperability. Unlike most states, New Mexico's centralized public health system could help facilitate these needed upgrades. <u>Maricopa County, AZ provides an example of how New Mexico could generate weekly heat surveillance reports</u>.



Recommendation 3. Treat Heat as a Mass Casualty Event: Extreme heat kills more people in the US every year than any other extreme weather event. As the most pronounced impacts of extreme heat are patient surges to emergency departments, traditional emergency response agencies have struggled to appropriately intervene based on forecast data. By treating extreme heat like other extreme weather events or an acute mass casualty event, anticipatory actions such as response coordination, resource prepositioning, and ensuring appropriate emergency waivers and patient movement authority is needed. The 2021 Pacific Northwest heat dome provides an example of how mass casualty systems can be leveraged to support a regional heat response.

Recommendation 4. Prepare for Concurrent Hazards: Enhance resilience against concurrent hazards, such as electric infrastructure failure and wildfires. Hospitals and other healthcare facilities must prepare for contingencies for losing power during extreme heat events to ensure critical health services can continue to be provided without interruption.

High temperatures accelerate the drying of fuels, increasing the likelihood of wildland fires. Extreme heat can decrease efficiency of electrical lines while increasing the demand for electricity for cooling creates critical strains on infrastructure. <u>Research looking at a multiday heat wave and simultaneous blackout in Phoenix found that tens of thousands of residents would likely die and hundreds of thousands would require emergency department care.</u>



Recommendation 5. Provide Safe, Accessible, and Culturally Appropriate Cooling Centers:

Collaborate with organizations that serve vulnerable populations (housing insecure, elderly, etc.) to ensure cooling centers are safe, accessible, and welcoming. Ensure centers are appropriately stocked with cooling supplies, water, and ventilation systems and provide medical and behavioral health professionals to support urgent needs. These facilities should have backup power to ensure their functionality if power outages occur.

Mobile cooling centers should be considered, especially for high needs communities and in higher pedestrian trafficked areas. For example, <u>city buses could be parked</u> and running near unhoused people's public dwellings, athletic events, event spaces, and other heavily pedestrian trafficked areas.

Recommendation 6. Supply Cooling Resources to Organizations: Distribute cooling supplies (cooling packs, insulated water bottles, spray bottles, misting fans, etc.) to public entities and non-profit groups working with vulnerable groups, such those who are unhoused, people with substance use disorder, seniors, foodbanks, community centers in economically disadvantaged neighborhoods, and people living with disabilities. Consider pre-staging supplies at locations identified via relevant authorities, emergency response agencies, public health workers and community-based organizations.



Recommendation 7. Stop Utility Shut-Offs and Waive or Subsidize Costs for Low-Income

Households: To protect those most vulnerable to extreme heat, utility companies should be prohibited from disconnecting essential utility services, such as electricity and water, during periods of extreme heat. Local and state authorities should work with utility companies to develop a program that mitigates the impacts of delayed payments, subsidizes expenses, or fully waives utility costs for low-income households during extreme heat events. Moratoriums can trap low-income households in debt. Information about utility shutoff programs must be widely disseminated and easily accessible to ensure that all residents, regardless of their financial situation, can maintain a safe indoor environment without fear of accruing unaffordable utility bills.

Recommendation 8. Establish a Statewide Heat Hotline: Create a hotline for heat-safety information, such as cooling center locations, tips to stay cool, and guidance on managing heat symptoms. This can be done by leveraging pre-existing hotline services such as 211 or 311. This has been implemented in multiple locations, including Oregon, Philadelphia, and New York City.



Healthy Climate New Mexico, 2024

Recommendation 9. Be Proactive in Messaging: Utilize various media platforms to disseminate clear, consistent, and culturally tailored messages about the risks of extreme heat and preventive measures to the general public. Establish a contact list of Tribal leaders, health-focused organizations, weather reporters, and community service organizations to notify when extreme heat is in the forecast. Collaborate with these recipients to deliver culturally appropriate and demographic-specific messaging to their communities. Strong relationships with community organizations, service providers, and first responders interacting with people who are unhoused and living in public spaces can act as critical communication multipliers through word of mouth.

Recommendation 10. Rural and Tribal Community Cooling Program: Accessing services in rural communities can be particularly challenging due to the dispersed geographic area and lack of infrastructure. Proactive outreach for energy assistance programs (such as LIHEAP) to ensure homes are retrofitted to reduce indoor heat, energy use, and can run air conditioners or heat pumps. Outreach and support for energy costs (see Recommendation 7) and air conditioner distribution or loan programs can ensure that rural and tribal communities are not further disadvantaged by heat-related expenses.



THANK YOU

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