MEMORANDUM

Date: May 5, 2025

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: Jan Lesher
County Administrator

Re: **Update on Regional Heat Response Initiatives**

Overview

Last summer marked the hottest year on record - globally, with Pima County seeing 112 days exceeding 100 degrees Fahrenheit well into the fall months. Last summer also marked a comprehensive, regional heat response effort spearheaded by Pima County Health Department (PCHD) and regional partners – deploying over 40 cooling centers, serving thousands across the Pima County Heat Response Network (HRN).

On March 1, 2024, Governor Hobbs announced the Arizona Department of Health Services (ADHS) Chief Heat Officer, and the state's 'Extreme Heat Preparedness Plan' to implement a statewide heat strategic plan with partner jurisdictions and regions throughout and across the state. Aligned with this directive, County Public Health Departments, cities, and other municipalities and community-partners directed their efforts to respond to extreme heat through comprehensive (equitable, multisector) planning, enhancements of cooling center networks, data-driven emergency response, and adapting safe, effective measures to support some of the most vulnerable community members.

In response to growing heat across the region, last summer was marked by key milestones across the Heat Response Network – a collaboration of over 20 regional partners (local governments, state partners, academia, climate researchers, non-profits, shelter operators, and faith-based organizations – among others), running over 40 cooling centers, respite sites and hydration stations serving thousands of people throughout heat season.

Attached is PCHD Director Dr. Terry Cullen's Memorandum highlighting the activities, evaluation and public health data reporting on the impact of last year's heat season and the results of local efforts from the regional HRN partnership – Pima County Heat Relief Network (HRN), emergency planning, response, and data-driven approach to resourcing the community during extreme heat.

Heat Response Season – 2024 Highlights, Successes, and Evaluation

- On May 7, 2024, the BOS passed Resolution 2024-17 Heat Awareness Week. This Resolution is crafted in alignment with other Statewide proclamations and enables the County to support annual Heat Awareness campaigns for years to come.

- **Heat Relief Network** - comprehensive partner network activation of over 40 cooling centers, respite sites and hydration stations serving thousands of people through heat season.
- **Beat the Heat** Communications Campaign - the County's Beat the Heat communication strategies are an essential component of heat safety planning each year. The content is representative of a collection of critical communications shared across the regional partnership to ensure collective and impactful heat safety messaging.
- **Data-Driven Heat Strategies**– Deploying resources based on vulnerability data such as the social vulnerability index, census tract data, and current / historical epidemiological and Office of Medical Examiner (OME) Data ensuring equitable and comprehensive service access to the region's most vulnerable – including, but not limited to individuals experiencing homelessness, elderly, mobile home and rural residents, among others.
- **Bolstering essential cross-sector partnerships** to ensure an accessible, comprehensive network of partners to ensure all types of heat resources are available including governments, non-profit organizations, academia, national and state- partners, and faith-based organizations.
- Deploying the **Pima County 3-year Heat Plan** of which 2025 Heat Season will implement year-2 strategies.

The County engaged as a planning partner with the City of Tucson for the Annual Heat Summit in February 2025. Underscored by temperature trends over recent years, and demonstrated longer and hotter summers, our definition of heat season was extended to include April and October – compared to the previously defined May through September heat season. As a result, the HRN – lead by PCHD – planned and then initiated the Pima County Heat Season response starting in April 2025.

While 2024 was the hottest on record, heat-related deaths reduced overall especially compared to the growth in extreme heat days. Of the total heat-related deaths, 60 percent were age 65 and older, 30 percent were unhoused. In 2023, we knew that many of our heat-related deaths occurred in people that have been in Pima County longer than 20 years, underscoring the need for continued communication on risk.

Based on the 3-year Heat Plan and feedback from Cooling Center surveys, there is also a need to create broader access to strategies that help the region move away from reliance on cooling centers as a response, and continue to support services that keep individuals safe such as housing and longer-term shelter programs, home weatherization and repair program access, utility and rent assistance, grid reliability, and utility / emergency response coordination.

Heat Workforce Safety

Last summer, the County set forth to create and implement two critical pieces of workforce safety measures to protect workers in high heat worksites. In June, I implemented Administrative Procedure 3-35 – Heat Workforce Safety and in September the Pima County Board of Supervisors approved Chapter 11.40 – Workplace Heat Safety, adding this new chapter and modifying the Pima County Procurement Code – of which Pima County was the first County in the nation to adopt such a policy. This was alongside other policy adoptions by the City of Phoenix and the City of Tucson.

To build the most effective workforce safety plans, the County and its partners solicited ample feedback from labor unions, the business community, and over 1,300 County employee survey respondents to ensure that critical heat safety priorities were integrated into these policies, procedures and directives. Upon completion of the proposed Heat Ordinance drafting process, the County solicited public feedback on the proposed language, receiving feedback from across the community and the Arizona Attorney General.

These policy documents include critical heat safety training / planning components that are aligned with federal guidance from agencies such as Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH). Core components represented in these documents include acclimatization best practices, access to shade, water and breaks, identifying heat-related illness and heat-related emergencies (and associated emergency response and communication protocols), and written safety materials for reporting a heat-related emergency to response entities and Arizona Department of Occupational Safety and Health (ADOSH). Materials for heat safety planning aligned with the ordinance are publicly available.

Overseen by the County Administrator's Office, the County has set forth an interdisciplinary team across County departments (such as the Procurement, Health, and those with contracts that have work often occurring at a high-heat work site – such as, but not limited to, Facilities Management, Project Design and Construction) to implement, monitor, and evaluate the Administrative Procedure and the Ordinance. County departments will receive annual training and will develop heat safety plans for their respective departments and divisions.

Heat Season 2025

Planning for Heat Season 2025 was marked by the 2025 Southern Arizona Heat Summit, organized by City of Tucson in collaboration with Pima County and University of Arizona – among many others. This provided key evaluative data on the 2024 Heat Season, lessons learned and a space to collectively identify priorities for 2025's season – such as Community-Based Resilience, Public Health Emergency Response, Workforce Heat Protection, Energy and Infrastructure Resilience, Policy and Governance Solutions. The Summit had hundreds in attendance and breakout sessions led to comprehensive idea sharing, planning for the upcoming season and goal setting.

Pima County Health Department kicked off its Heat Emergency Response effort with its first collaborator call in April and anticipates that the 2025 Cooling Center Network will be deployed in mid-May.

We will update the Board regularly throughout the 2025 Heat Season.

JKL/dym

Attachment

c: Carmine DeBonis, Jr., Deputy County Administrator
Steve Holmes, Deputy County Administrator
Terry Cullen, MD, MS, Public Health Director, Health Department
Sarah Davis, Senior Advisor, Pima County Administrator's Office

PIMA COUNTY
HEALTH DEPARTMENT

MEMORANDUM

Date: May 5, 2025

To: Jan Lesher
Pima County Administrator

From: Theresa Cullen, MD, MS
Health Department Director

Re: 2024 Heat Season Evaluation Report

The purpose of this memo is to share the 2024 Heat Season Evaluation Report prepared by the Pima County Health Department. This report presents the County's first coordinated effort to evaluate heat response activities and synthesize data collected between May and September 2024.

The 2024 heat season marked the hottest year on record for Pima County, with over 112 days exceeding 100 degrees Fahrenheit and elevated temperatures extending into October. These conditions prompted a countywide response coordinated by the Pima County Health Department and a broad network of partners. In line with Governor Hobbs' March 1 directive and the Arizona Department of Health Services' statewide heat preparedness plan, the Health Department's Office of Heat Response and Relief facilitated a joint heat response effort with regional partners.

The 2024 Heat Season Evaluation Report represents the first comprehensive synthesis of heat-related health data, response activities, and operational performance across Pima County. It includes analysis from epidemiological surveillance, public surveys, program evaluations, and stakeholder feedback. Key contributions to this evaluation came from the University of Arizona BRACE and SCORCH teams, Arizona Department of Health Services, City of Tucson, National Weather Service, Medical Reserve Corps of Southern Arizona, and community-based organizations across the region.

Major accomplishments from the 2024 season included:

- Coordination of weekly heat briefings with regional partners
- Formation of the Joint Heat Advisory Council
- Launch of a public-facing cooling center dashboard
- Expansion of the multilingual Beat the Heat campaign
- Deployment of over 40 cooling centers countywide, serving thousands of residents

The 2024 report also identified several opportunities for strengthening Pima County's heat response. Key recommendations included expanding the defined heat season to begin in mid-April, enhancing public communication strategies, improving cooling center access and operations, and advancing real-time heat-related illness surveillance.

Attached for review is the 2024 Heat Season Report Summary. The 2024 Heat Evaluation Technical Appendix can be viewed here.

For further information, please contact heat@pima.gov.

TC/ms

Attachment: 2024 Heat Season Evaluation Report Summary

c: Steve Holmes, Deputy County Administrator
Sarah Davis, Senior Advisor, County Administration

2024

Heat Season Evaluation: Report Summary

PIMA COUNTY
HEALTH DEPARTMENT

2024 HEAT SEASON EVALUATION

Report Summary

Evaluations Provided by:

Pima County Health Department Epidemiology Division
Erin Woods, MPH; Cheyenne McChesney, MPH; Ellen Santos, MPH PhD

Pima County Communications Office

University of Arizona Building Resilience Against Climate Effects (BRACE) team
Heidi Brown, MPH PhD; Allison Sarko, BS; Erika Austhof, MPH PhD; Ladd Keith, PhD

University of Arizona Southwest Center on Resilience for Climate Change and Health (SCORCH) team
Mona Arora, PhD; Aurea Cunanan, BS; Laura Schweers, MSW

Compiled and presented by:

Pima County Health Department Office of Heat Response and Relief

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ACKNOWLEDGEMENTS

The 2024 Heat Season Evaluation Report represents the work of over two dozen individuals. Additionally, this evaluation work could not have been possible without the involvement of many partners active in 2024 heat relief work, including (alphabetically):

Amistades, Inc.
Arizona Department of Health Services
Arizona Faith Network
Arizona Mobile Homeowners Association
Arizona Public Service
City of Tucson Housing and Community Development
City of Tucson Mayor's Office
City of Tucson Office of Resilience
City of Tucson Parks and Recreation
City of Tucson Ward 3 Office
Direct Advocacy and Resource Center
Medical Reserve Corps of Southern Arizona
National Weather Service, Tucson Office
Pascua Yaqui Tribe, Office of Emergency Management
Pima County Communications Office
Pima County Community Workforce Development
Pima County Division of Emergency Mitigation and Preparedness
Pima County Health Department
    Community Outreach
    Tribal Liaison
    Vaccine Equity
Pima County Libraries
Pima County Office of Emergency Management
Pima County Office of the County Administrator
Pima County Office of the Medical Examiner
Pima County Parks and Recreation
Poder Casas Moviles
Primavera Foundation
Search and Rescue Council, Inc.
Sister Jose's Women's Center
Southern Arizona Red Cross
Southern Arizona Search and Rescue
St. Francis Shelter Community
The Salvation Army Hospitality House
Tohono O'odham Nation Public Health Emergency Preparedness
Tucson Electric Power

Tucson Fire Department
Tucson Pima Collaboration to End Homelessness
Tucson Water
University of Arizona Climate Assessment for the Southwest
University of Arizona College of Architecture, Landscape Architecture and Planning
University of Arizona Mel and Enid Zuckerman College of Public Health, One Health Program
University of Arizona School of Geography

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Work by the Office of Heat Response and Relief is funded through Pima County's SPRING Initiative for an Equitable and Healthy Community Communications campaign – was funded in full by Award Number 1 NE11OE000098-01-00 issued by the U.S. Department of Health and Human Services (HHS) as a part of a financial assistance award totaling $11,924,381.00 with 100 percent of funding from the Centers for Disease Control and Prevention (CDC)/HHS. The contents are solely the responsibility of the author(s) and do not necessarily represent the official views of, nor an endorsement by the CDC/HHS, or the U.S. Government. For more information, please visit https://www.cdc.gov/index.htm.

The Pima County Health Department provides coordination and facilitation support for heat relief efforts in Southern Arizona throughout the year. Please contact heat@pima.gov for more information or to learn how to get involved.

INTRODUCTION

Extreme Heat—A Growing Public Health Priority

Extreme heat is a growing public health concern, affecting more Americans each year. These events can strain individual health, disrupt social and economic systems, and challenge overall community well-being. In Pima County, geographic diversity, socio-economic disparities, and the needs of vulnerable communities require a targeted and adaptable response. Solutions must address immediate risks while building long-term resilience.

Local governments and partner agencies are already taking action to reduce human exposure to extreme heat. These efforts align closely with carbon reduction strategies, creating a twofold benefit for our community. Notable initiatives include the City of Tucson's Climate Action Plan and *Resilient Together* program (COT-CAP), as well as *Pima CAN! Climate Action Now!* (Pima CAN). These programs aim to reduce the urban heat island effect, expand tree canopy and other vegetation, and promote sustainable housing and transportation. Federal assistance through the Low-Income Home Energy Assistance Program (LIHEAP) also provides critical utility support to low-income households.

In 2024, the Arizona Department of Health Services (ADHS) defined the "heat season" as May 1 to September 30—a span of 152 days. During this period, 39 sites were listed on the regional heat relief map, including 23 Pima County Public Library branches, six nonprofit organizations, and ten community centers or government-run locations. These sites recorded over 14,000 visits. Three additional official cooling centers—The Salvation Army Hospitality House, Ward 3 Community Center, and Operation Chill Out—were active but lacked documented visitor data, despite known use by individuals experiencing homelessness.

Pima County experienced 99 days with temperatures at or above 100°F, including 44 days reaching 105°F and six days of 110°F or higher. The National Weather Service issued four heat watches, one advisory, and eight heat warnings. A heat warning indicates that immediate action is necessary to prevent heat-related illness (HRI).

According to data from the CDC's ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics), the Pima County Health Department (PCHD) Epidemiology Program tracked 787 hospital visits due to HRI. Of those affected, 70% were male, and 34.3% were between the ages of 20 and 44. A total of 101 deaths were linked to extreme heat—37 directly caused by heat and 64 where heat was a contributing factor.

As extreme heat events become more common, public health agencies must remain vigilant and proactive. The 2024 Heat Season Evaluation Report provides key insights to help guide

Pima County's ongoing efforts in preparedness, resource distribution, and community engagement. Through collaboration and data-driven strategies, PCHD and its partners are working to build a safer, healthier, and more resilient future for all residents.

LESSONS LEARNED

The 2024 heat season presented both ongoing challenges and new opportunities for innovation in Pima County's heat response efforts. As temperatures continued to rise and extreme heat events became more frequent, our ability to adapt, coordinate, and respond effectively was put to the test.

Through cross-sector collaboration, data-informed strategies, and community-centered approaches, Pima County departments and partners worked together to safeguard public health and reduce the impacts of extreme heat—particularly on our most vulnerable residents. This section highlights three key lessons learned during the 2024 heat season:

1. **Community partnerships are critical to strengthening local heat data collection efforts.**
2. **Leveraging existing community resources significantly improves access to heat relief and resilience.**
3. **Diverse communication strategies are essential for delivering timely, accessible public education on heat safety.**

Each lesson reflects practical insights gained through fieldwork, evaluation, and coordination across jurisdictions, organizations, and community networks. These lessons reinforce the importance of leveraging existing community strengths—such as partnerships, infrastructure, and communication—to build long-term resilience.

Lesson 1: Community partnerships are critical to strengthening local heat data collection efforts.

To effectively respond to the growing threat of extreme heat, PCHD recognized that timely, localized data was essential—not just to understand what was happening, but to drive decisions that could save lives. In 2024, PCHD made a strategic pivot toward data-informed action by expanding partnerships with academic institutions, nonprofit organizations, and local jurisdictions. These partnerships helped PCHD act more intentionally and equitably, guiding limited resources to where they were most needed.

This commitment to data as a public health tool was led by the Office of Heat Response and Relief, a unit within PCHD's Emergency Mitigation and Preparedness Division. Throughout the heat season, the Office of Heat Response and Relief served as a central hub for coordinating insights from researchers, epidemiologists, and community partners, transforming scattered observations into actionable intelligence.

PCHD's collaborative approach came to life through several different means, including academic partnerships, public health surveillance, and direct community input—each offering a distinct yet complementary lens on the impacts of extreme heat and opportunities for more effective response. By integrating academic expertise, surveillance data, and community voice, PCHD strengthened its ability to act as a chief health strategist by not just responding to emergencies, but anticipating them.

The following collaborative efforts formed a more complete, more human-centered picture of heat risk in Pima County:

Academic Partnerships

One of PCHD's strongest assets in 2024 was its close working relationship with the University of Arizona (UA), which brought scientific rigor and capacity to the department's heat response efforts. Two major research initiatives at UA—BRACE (Building Resilience Against Climate Effects) and SCORCH (Southwest Center of Resilience for Climate Change and Health)—offered valuable, real-time insights into how residents were experiencing and coping with extreme heat.

BRACE focused on understanding the lived experiences of individuals who used local cooling centers. The team collected 1,173 surveys from users across the county, revealing not only who was seeking relief, but why. Key findings included:

- 53% of respondents were unhoused, emphasizing the outsized risk borne by those without shelter.
- 37% reported having housing but inadequate cooling, pointing to a broader population facing heat-related hardship.
- 48% arrived by public transit, and 42% walked, reflecting the transportation vulnerabilities that often go hand-in-hand with heat exposure.
- Many participants identified public libraries as their primary cooling centers, reinforcing their role as trusted and accessible spaces in the community.

This data helped PCHD refine its outreach and better tailor cooling resources to the needs of the most vulnerable.

At the same time, SCORCH synthesized findings from across PCHD and its partners. The SCORCH team organized their analysis into four cross-cutting themes:

1. **Partnerships and Collaboration** – examining internal and external coordination efforts.
2. **Communication** – identifying gaps and strengths in messaging and information flow.
3. **Data Collection** – assessing how data was gathered, where gaps existed, and how it could be improved.

4. **Cooling Center Operations** – providing feedback on site management, logistics, and resource needs.

Crucially, SCORCH aligned these findings with the CDC's Public Health Emergency Preparedness capabilities, framing heat response not just as a seasonal challenge but as a year-round public health preparedness priority.

Public Health Surveillance

While academic partners provided in-depth qualitative insights, PCHD's Epidemiology team ensured that real-time surveillance painted a comprehensive picture of the health consequences of heat. Their work incorporated multiple tools and data sources, including geographic information systems (GIS) and national surveillance platforms like the CDC's ESSENCE Syndromic Surveillance System.

GIS mapping showed that many cooling centers were clustered in central Tucson, leaving critical service gaps in high-vulnerability zip codes like 85705, 85706, and 85756. These neighborhoods scored high on the Arizona Social Vulnerability Index (SVI), yet had few nearby options for cooling relief. This mismatch underscored the need for more equitable site placement and mobile services in future years.

Data from the ESSENCE system and the medical examiner's office provided a real-time look at the human toll of extreme heat:

- 787 heat-related illness (HRI) emergency visits were recorded in 2024—slightly down from 823 in 2023, but still alarmingly high.
- 101 deaths were attributed to heat exposure, down from 123 in the previous year.
- Of those who died, 60% were age 65 or older, and 30% were unhoused—a group that continues to be disproportionately affected and underrepresented in hospital data due to barriers to care.
- 70% of HRI visits involved males, and over one-third were between the ages of 20 and 44, highlighting the need to target prevention messages beyond just older adults.

These surveillance efforts provided PCHD with a pulse on the community's health and helped shape near real-time interventions, including targeted outreach and emergency alerts.

Community Input

Perhaps the most grounding data came directly from residents themselves. Through the 2024 Community Health Needs Assessment (CHNA), more than 4,000 people shared their experiences, concerns, and suggestions related to extreme heat. This survey reached across demographics, including tribal communities, and revealed that:

- 77.9% said extreme heat impacted their daily life

- The top three impacts were:
    1. Reduced outdoor activity due to safety concerns
    2. Financial strain from increased utility bills
    3. Transportation barriers, especially among residents without personal vehicles

These findings added critical texture to the data landscape. It wasn't just about numbers—it was about how people were living through these conditions, and what they needed to stay safe. For example, while maps could show where cooling centers were located, community feedback revealed whether those sites were truly accessible, trusted, and utilized.

Lesson 2: Leveraging existing community resources significantly improve access to heat relief and resilience.

As the summer unfolded, it became clear that no single agency could meet the challenge of extreme heat alone. PCHD leaned heavily on cross-sector partnerships—both longstanding and new—to expand its reach and deliver relief to those most at risk. This lesson centers on the importance of shared ownership, and how a collaborative ecosystem helped the County rapidly scale its heat response efforts across jurisdictional and organizational boundaries.

A key turning point came with the formal launch of the Office of Heat Response and Relief in spring 2024. Positioned within the Emergency Mitigation and Preparedness division, the Office of Heat Response and Relief became the coordinating backbone for heat-related efforts across PCHD and the broader community. Rather than creating parallel systems, the office aligned its work with existing emergency preparedness structures, enabling seamless integration of cooling strategies into broader climate resilience and public health frameworks.

The Office quickly became a centralized hub for communication, resource-sharing, and planning, especially through regular coordination meetings held before, during, and after the heat season. These convenings brought together more than 100 community partners, including representatives from libraries, housing agencies, emergency responders, social services, rural communities, local governments, and nonprofits. These meetings helped build relationships and trust that made rapid, collective action possible.

Growing the Network

One of the most visible signs of successful coordination was the expansion of cooling centers, which grew from 39 locations in 2023 to over 60 cooling sites and water distribution hubs in 2024. This growth was driven by a powerful combination of data analysis, community feedback, and a spirit of shared purpose.

Public Libraries—already trusted, accessible spaces—were essential partners in this effort. Dozens of Pima County and City of Tucson library branches served as primary daytime cooling centers, equipped with water, charging stations, and staff trained to identify signs of heat distress. The library system's deep community relationships and regional coverage helped bridge gaps in vulnerable neighborhoods.

Rural partners—including health clinics, community organizations, and churches in Ajo and other outlying areas—worked creatively to deliver relief where permanent cooling centers weren't feasible. One innovation was the deployment of the COOLtainer, a refrigerated mobile unit stationed in remote locations to provide water, cooling supplies, and a mobile refuge in regions where heat deaths often go underreported.

City of Tucson departments, especially Tucson Fire Department, were instrumental in heat response logistics and emergency care. EMS providers used heat-related illness data to identify "hot spots" and provide proactive wellness checks, while also referring high-risk residents to support services. The Health Department convened a Joint Heat Action Team—a collaboration between TFD, Housing and Community Development, and community health workers— which became a model for multidisciplinary response in mobile home parks and encampments.

These coordinated efforts helped target communities most at risk, including mobile home residents, many of whom face extreme indoor temperatures due to aging infrastructure, power outages, or lack of air conditioning. Partners distributed shade structures, fans, tarps, and coolers to help mitigate risk when evacuation wasn't possible.

Policy as a Lever for Partnership

At the same time, the Board of Supervisors adopted a first-of-its-kind County Heat Ordinance, which formalized expectations for cooling center operations during excessive heat warnings. This policy helped shift heat response from an optional, seasonal initiative to an institutionalized public safety strategy.

The ordinance also signaled that heat was now a shared public health responsibility—not just for emergency responders or healthcare providers, but for anyone whose operations intersected with vulnerable populations. For example, American Red Cross and MRCSA (Metropolitan Regional Coalition for Shelter Access) played a critical role in supporting people experiencing homelessness, working alongside PCHD to distribute water, emergency kits, and referrals to indoor shelters during heat emergencies.

As the network matured, the Office of Heat Response and Relief played a key role in reducing redundancy, connecting partners, and tracking unmet needs—ensuring that all sectors worked in alignment rather than silos.

By elevating heat response through both coordination and policy, PCHD helped create durable systems that could sustain action year after year, even as leadership or funding changed. This shift laid the groundwork not only for better outcomes in 2024—but for a long-term public health model of how to tackle climate-related threats with collective care and shared responsibility.

Lesson 3: Diverse communication strategies are essential for delivering timely, accessible public education on heat safety.

By the time temperatures in Pima County began to climb in 2024, there was a clear and urgent need: ensure that residents not only knew about the dangers of extreme heat, but also felt empowered to take steps to protect themselves and others. Public health messages would need to travel far and wide—and reach the people most at risk, in the ways they actually consume information. From launching a countywide campaign to embracing digital coordination platforms, the Health Department and its partners demonstrated how strategic messaging, collaboration, and technology can save lives in a changing climate.

Countywide Public Awareness Campaign: Beat the Heat

In partnership with the Pima County Communications Department, PCHD spearheaded the "Beat the Heat" public awareness campaign—a broad-reaching initiative designed to inform, educate, and motivate action during extreme heat events.

Rather than rely solely on traditional PSAs, the campaign embraced a multichannel strategy. It included:

- Dedicated website with up-to-date cooling center maps, heat safety tips, and multilingual resources.
- Downloadable graphics and educational materials for community partners.
- Printed flyers in English and Spanish distributed across clinics, shelters, libraries, and transit stations.
- A mix of paid and organic social media content optimized for platforms like Facebook, Instagram, and Twitter/X.

What made the campaign stand out was its focus on tailored messaging. Rather than a one-size-fits-all approach, Pima County Communications developed content for:

- Older adults living alone or without AC
- Children and caregivers
- People experiencing homelessness
- Outdoor workers and hikers
- Individuals on heat-sensitive medications
- Low-income residents and mobile home communities
- People riding Sun Tran buses or living in shelters

- The general public

These groups weren't just identified based on health risk—they were prioritized based on equity. Many face systemic barriers to safety during extreme weather, and the campaign met them with targeted outreach designed to inform, not alarm.

Campaign Highlights and Impact

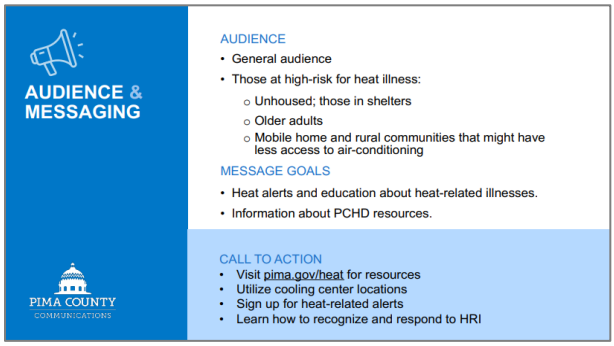
The campaign reached over 2.6 million impressions across social media platforms during just five months—driven by 238 original posts and a carefully designed paid ad strategy that reached residents based on geography and risk profile.

Several elements contributed to the campaign's effectiveness:

Reused and repurposed assets from prior years allowed for faster production while preserving brand consistency.

Materials were distributed through community newspapers, posted in geotargeted zones, and shared directly by dozens of partner organizations.

The campaign generated earned media coverage across local, state, and national outlets—amplifying the urgency of Pima County's message far beyond its borders.



What We Learned:

- **Start earlier.** More lead time in campaign planning and creative development allows for broader distribution and deeper reach.
- **Highlight community care**. Posts that encouraged residents to check on neighbors, donate supplies, or volunteer performed especially well—reflecting a desire for connection.
- **Clarity drives action**. Content that was direct, specific, and action-oriented (e.g., "Find a cooling center near you") consistently outperformed general heat warnings.
- **Civic Roundtable: Behind-the-Scenes Coordination.** Just as critical as public-facing communication was the internal coordination happening among partners. Pima County used Civic Roundtable, a secure, web-based collaboration tool offered by the Arizona Department of Health Services, to bring interagency efforts into alignment. Civic Roundtable allowed for:
    - Virtual meetings that kept dozens of partners on the same page
    - File sharing and real-time updates
    - A centralized space where health alerts, situational reports, and outreach plans could be shared

With this platform, the County minimized duplication, streamlined decision-making, and ensured that efforts were not only aligned—but visible and accessible to all participants.

Examples of Collaborative Information Sharing:
The National Weather Service (NWS) provided timely heat alerts and co-hosted a regional coordination meeting where local agencies could share needs and plans in real time.
ADHS supported outreach by relaying consistent statewide heat advisories and encouraging cross-county alignment on messaging and intervention strategies.

This exchange of information allowed Pima County to move quickly and in unison with its partners—strengthening trust, building credibility, and ensuring the public received clear, timely, and coordinated messages during critical moments.

HEAT SEASON PROGRAM EVALUATION

On January 7, 2025, the Office of Heat Response and Relief hosted a Heat Season Data and Evaluation Report Presentation (Hotwash). This presentation brought together practitioners and researchers to review the preliminary 2024 evaluation results. This convening aimed to foster collaboration, share insights, and build the capacity of partners to improve evaluation efforts in 2025.

The Hotwash elucidated several recommendations. The written summary following the table below delineates recommendations that are *data-driven*, *cross-referenced with multiple evaluations*, and *prioritized* for maximum effectiveness. The table below shows the frequency of agreement on different hotwash discussions.

Matrix of Alignment among Evaluations							
	Cooling Center Surveys				Analytics	Analytics	After Action Report
Recommendations	**Extreme Heat Community Survey**	**Heat Surveillance**	**Administrators and Staff**	**Visitors**	**Cooling Center Map**	**Beat the Heat Campaign**	**Hotwash**
Refine Heat Season Definition		✅			✅		
Improve Heat Surveillance and Data Sharing		✅					✅
Enhance Public Risk Communication	✅	✅	✅	✅		✅	✅
Expand Cooling Center Access, Siting in Areas of Community Need, and Services	✅		✅	✅		✅	✅
Address Utility Assistance and Home Cooling	✅		✅	✅			✅
Optimize Marketing and	✅		✅	✅		✅	✅

Matrix of Alignment among Evaluations							
	Cooling Center Surveys				Analytics	Analytics	After Action Report
Recommendations	**Extreme Heat Community Survey**	**Heat Surveillance**	**Administrators and Staff**	**Visitors**	**Cooling Center Map**	**Beat the Heat Campaign**	**Hotwash**
Media Strategies							
Strengthen Multi-Agency Coordination			✅	✅			✅
Improve Data Collection and Evaluation		✅	✅	✅			✅

SUMMARY OF HOTWASH RECOMMENDATIONS

After the 2024 heat season, participants from across agencies and organizations came together to share what worked, what didn't, and how we can improve. Together, they identified eight key recommendations to strengthen our community's response to extreme heat in the future:

1. **Refine Heat Season Definition**
    - Transition from fixed calendar dates to temperature thresholds for defining heat season.
    - Use temperature-based triggers to better align resource mobilization with heat risk.
2. **Improve Heat Surveillance and Data Transparency**
    - Strengthen collaboration with the National Weather Service for enhanced heat surveillance.
    - Fully implement the Heat Morbidity Dashboard for real-time tracking of HRI.
    - Use *heat risk indices* in epidemiological analysis to improve public health interventions.
3. **Enhance Public Risk Communication**
    - Target outreach for heat advisories and cooling centers by age group (social media for younger people, TV and print for older populations).

- Expand public messaging to emphasize community support (e.g., checking on neighbors and loved ones).
- Clarify cooling center access, particularly information about water availability and during power outage responses.

4. **Expand Cooling Center Access and Services**
   - Address transportation barriers to cooling centers, especially for older adults and unhoused individuals.
   - Improve staffing and training at cooling centers, including heat-related illness response and de-escalation training.
   - Consider extended hours and additional services (meals, rest areas, showers, pet access) to provide comprehensive support to attendees.

5. **Address Utility Assistance and Home Cooling Barriers**
   - Raise awareness about utility assistance programs, as a significant portion of residents do not know how to apply.
   - Identify financial resources to help with HVAC maintenance, insulation, and energy costs, particularly for low-income and older adult residents.

6. **Optimize Marketing and Media Strategies**
   - Start campaign planning earlier to align messaging with rising temperatures.
   - Use both paid and organic social media, as unpaid outreach performed 10x better than paid ads in past campaigns.
   - Align resource distribution—cooling centers located in high-need areas.

7. **Strengthen Multi-Agency Coordination**
   - Expand partnerships, e.g. Veteran Affairs Hospital, American Red Cross (ARC), pet organizations, and healthcare providers.
   - Collaborate with utility companies to address power outages during extreme heat events.
   - Streamline communications between local, state, and tribal entities to ensure consistent messaging and response.

8. **Improve Data Collection and Evaluation**
   - Cross-reference heat morbidity data with heat index levels to better predict risk periods.
   - Conduct ongoing surveys to assess barriers to cooling center access and effectiveness of outreach efforts.
   - Conduct evaluations on the needs and preferences of rural residents
   - Use data insights to refine future interventions, such as citing of cooling centers, for vulnerable populations.

CONCLUSION

The 2024 heat season made clear the importance of strengthening our collective response to extreme heat in Pima County. While the rising temperatures posed serious risks, they also highlighted the power of collaboration, innovation, and community resilience. Through strong partnerships, creative resource use, and targeted communication, we were able to protect lives—especially among our most vulnerable residents.

The lessons learned from this season reflect both the strengths and gaps in our systems. They offer a foundation for refining our strategies and building a more heat-resilient community. By continuing to work together across sectors, we can further reduce the health impacts of extreme heat and better prepare for the seasons ahead.

Next Steps

To build on this year's progress and implement the recommendations from the hotwash, we propose the following next steps:

1. **Convene a Multi-Agency Planning Session**
   Bring together key partners—government, nonprofits, and community groups—to begin translating these lessons into actionable strategies for the 2025 heat season.
2. **Finalize the Heat Morbidity Dashboard Rollout**
   Ensure the dashboard is publicly accessible, user-friendly, and regularly updated to support real-time decision-making.
3. **Begin Early Communications Planning**
   Coordinate with Pima County Communications and partners to develop heat awareness campaigns in advance of the 2025 season.
4. **Launch a Community Feedback Process**
   Use surveys, interviews, and focus groups—especially with rural and underserved populations—to better understand community needs and barriers to accessing services.
5. **Secure and Align Resources**
   Identify funding opportunities, staffing needs, and operational support to address the recommendations laid out in this report.

These actions will help Pima County move from reflection to readiness—ensuring that when the next heat season arrives, we are not only prepared to respond but positioned to protect every resident, no matter where they live or what challenges they face.

Full details about the programming completed for the 2024 heat season can be found in the

supplemental *2024 Heat Season Evaluation Technical Appendix*.