

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



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Acknowledgements

The City of Phoenix 2023 Heat Response Plan is an update of the City's first Heat Response Plan, which was unanimously approved by City Council in March 2022. The Heat Response Plan reflects initiatives and perspectives from many local and regional collaborators. It also draws content and direction from a network of related plans, including Phoenix's 2021 Climate Action Plan, the 2021 Maricopa County Hazard Mitigation Plan, the Maricopa County Department of Public Health Strategic Plan for Climate and Health, the Heat Action Planning Guide for Greater Phoenix, and the Arizona Department of Health Services Climate and Health Adaptation Plan.

Organizations listed below are partners in the heat response programs that the City operates or supports, have provided input regarding the content of this plan, and/or are responsible for programs or plans referenced in this document, or components thereof.

City of Phoenix Mayor and Council Offices

Office of Mayor Kate Gallego
Office of Vice Mayor Yassamin Ansari, District 7
Office of Ann O'Brien, District 1
Office of Jim Waring, District 2
Office of Debra Stark, District 3
Office of Laura Pastor, District 4
Office of Betty Guardado, District 5
Office of Kevin Robinson District 6
Office of Kesha Hodge Washington, District 8

City of Phoenix Departments and Functions

Arts & Culture
City Manager's Office
Communications
Environmental Programs
Fire
Heat Response and Mitigation
Emergency Management
Homeless Solutions
Housing
Human Services
Innovation
Library
Light Rail Transit
Neighborhood Services

Parks and Recreation
Police
Public Health
Public Transit
Public Works
Sustainability
Volunteer Programs
Water Services

Local, Regional, and National Partners

Arizona Department of Health Services
Arizona Faith Network
Arizona Heat Resilience Work Group
Arizona Public Service
Arizona State University
Bloomberg Associates
C40 Cool Cities Network
Centers for Disease Control and Prevention
Chispa AZ
Community Bridges, Inc.
Crisis Response Network
Feed Phoenix
Healthy Giving Council
Human Services Campus
Maricopa Association of Governments
Maricopa County Department of Emergency Management
Maricopa County Department of Public Health
Maricopa County Human Services Department
National Integrated Heat-Health Information System
National Weather Service Phoenix Forecast Office
Nature Conservancy Arizona Healthy Cities Program
Phoenix Community Emergency Response Team
Phoenix Industrial Development Authority
Phoenix Parks Foundation
Phoenix Revitalization Corporation
Salt River Project
Sustainable Cities Network
University of Arizona
Valley Metro
Valley of the Sun United Way

1. Introduction

The City of Phoenix Heat Response Plan outlines programs and services intended to protect public health and quality of life from the threats posed by hot weather. The City's first Heat Response Plan was passed in 2022 by a unanimous City Council vote. This document, the 2023 Heat Response Plan, provides an overview of heat response programs and services to be coordinated by the City of Phoenix for the upcoming warm season. It also contains a review of program performance, public health, and meteorological data from the prior year. The 2022 Plan contains more detailed background and contextual information than is included in this update.

The 2023 Heat Response Plan is another milestone in the City of Phoenix's efforts to innovatively respond to the sustainability and resilience challenges posed by the city's climatic setting in the Sonoran Desert. Phoenix is at the forefront of global efforts to close the gap in governance and planning for extreme heat at the local level. In 2021, the City created the world's first publicly funded municipal office focused on managing extreme heat. In 2022, Phoenix joined three other cities across the United States as part of the National Oceanic and Atmospheric Administration's Heat and Equity Pilot Program. This engagement included a federally coordinated two-day heat planning workshop in Phoenix in February 2023, which has informed updates to the Heat Response Plan.

The updated Heat Response Plan reflects input from many internal and external partners. Beginning in late 2022, the Office of Heat Response and Mitigation met with nearly every City Department and key external partners to evaluate the complete inventory of the City's heat response efforts, curate recommendations for new programs and program improvements, prepare budget requests, update the citywide heat safety communications plan, and revise logistical protocols for program implementation. These efforts were coordinated by a new Heat Response Program Manager in the Office of Heat Response and Mitigation.

The centerpiece of the Plan is the detailed list of 31 programs and services that Phoenix will lead and/or collaboratively implement in the summer of 2023. Many programs and services will begin operation on approximately May 1st.

2. Review of 2022 Heat and Public Health Data

Weather Conditions

The 2022 warm season (April 1–September 30) was among the hottest in the recorded history of Phoenix. Although there were relatively few extremely hot days—only one day reached 115°F—the season was characterized by above-average temperatures persisting for long stretches, until intermittent relief began to arrive with monsoon activity in late July. There were five stretches of at least 10 days in which daily high temperatures exceeded climatological normals every day:

- April 1–11 (11 days), average daily high 91.4°F, 7.9°F above average
- April 25–May 8 (14 days), average daily high 95.1°F, 5.7°F above average
- June 6–17 (13 days), average daily high 109.6°F, 6.0°F above average
- July 6–23 (18 days), average daily high 111.2°F, 4.6°F above average
- August 29–Sept. 7 (11 days), average daily high 108.8°F, 5.0°F above average

Overall, the 2022 warm season ranked as the 4th warmest out of the past 100 years with respect to average daily high temperatures (101.2°F) and the 2nd warmest out of the past 100 with respect to average daily low temperatures (77.5°F). The average daily high temperature was approximately 1°F higher than the same period in 2021, and the average daily low was approximately 0.8°F higher.

Measures of hot days and nights generally exceeded climatological normals and counts from 2021. The 2022 warm season had the 5th highest number of 85°F nights in the past century (50 nights); counts of 100°F and 110°F days were in the top 15, and top 25, respectively (113 and 22). 2022 had 4 more 85°F nights, 9 more 100°F days, and the same number of 110°F days as 2021.

National Weather Service Excessive Heat Warnings from the were in effect on 18 days.

Public Health Impacts

Heat-Associated Mortality

As of April 3, the Maricopa County Department of Public Health had confirmed 424 heat-associated deaths for 2022, with a limited number of additional cases pending further review. The 2022 total reflects an increase of 25% above the heat-associated death total from 2021 and is the highest number of heat-associated deaths reported since formal tracking began in 2006. The final report for 2022 heat-associated deaths is

expected to be published by the Maricopa County Department of Public Health within the next 4–8 weeks, after which a more detailed analysis for the City of Phoenix will be completed.

The most recent available reporting with respect to risk factors and circumstances associated with heat-associated deaths in 2022 was published at the end of October and includes statistics for 378 of the confirmed 424 cases in Maricopa County (89%).

Key statistics include:

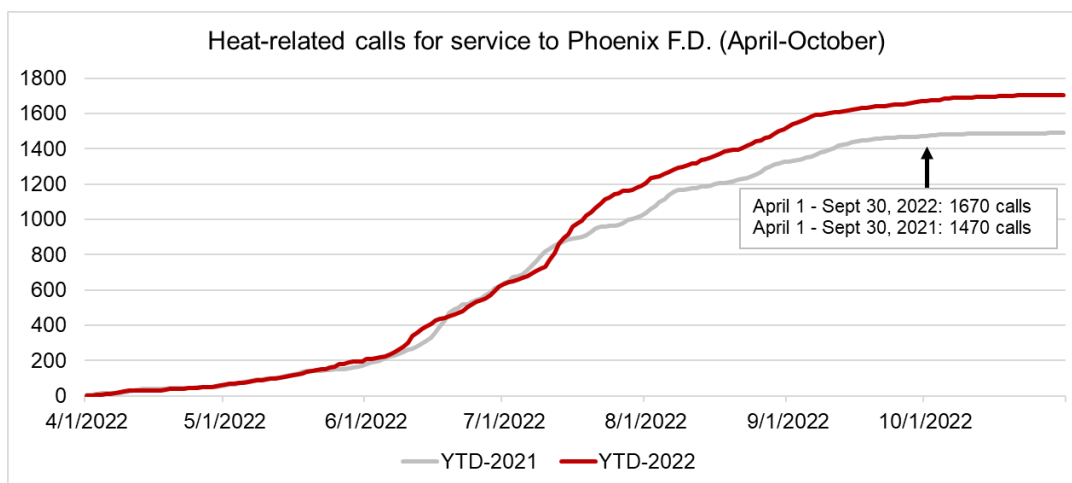
- 79% of cases had an outdoor place of exposure
- 58% of heat-associated deaths were among residents ages 35–64
- Of the 77 indoor heat-associated deaths confirmed to date, 45 were in residences with non-functioning air conditioning, 10 were in residences with the air conditioning not in use, and 14 were in residences with no air conditioning. Two indoor heat-associated deaths occurred in a residence with no electricity.

Other key metrics from the 2021 annual report that are anticipated to be similar in 2022:

- 60% of cases involved substance use, with most substance use cases involving drugs without alcohol
- 38% of cases involved people experiencing homelessness. The rate of heat-associated death among people experiencing homelessness is approximately 300 times higher than the rest of the population.

Heat-Associated Morbidity

The Phoenix Fire Department responded to 1,670 calls for service identified by the dispatcher to be related to heat between April 1 and September 30, 2022. This was a 13.6% increase over the same period in 2021. Advanced life support systems were deployed for 508 of the 1,670 calls (about 30%).

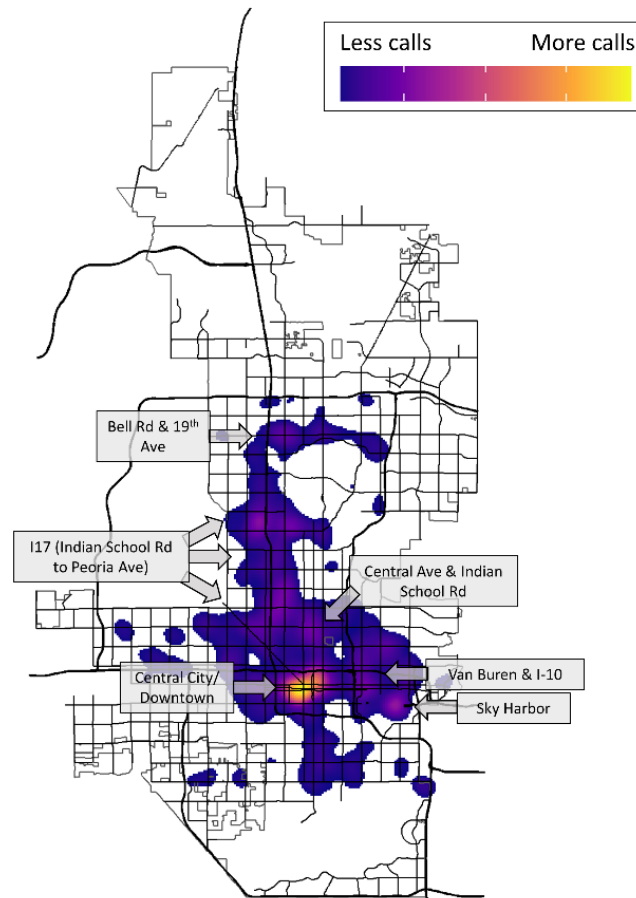


The month of July had the highest volume of heat-related calls with a total of 574 (18.5 per day, on average). More than 40% of the calls during July occurred over the seven-day period spanning July 11–17, in which call volume increased to nearly 35 per day. The week had an average daily high temperature of 113°F. The 243 calls recorded during that week represented the highest number of heat-related calls in any week in available records, which date back to 2014.

Spatial analysis of heat-related calls for service revealed several locations where impacts were particularly concentrated. The highest density of calls was in the Central City/Downtown area. Other locations with elevated call frequency included the I-17 corridor between Indian School Rd. and Peoria Ave., Sky Harbor airport and its surroundings, Bell Road and 19th Avenue, Central Avenue and Indian School Road, and Van Buren St. and I-10.

Density map of Phoenix Fire Department calls for service related to heat April 1 – September 30, 2022

*Note: Locations are approximated based on partial addresses or cross streets.



3. Review of 2022 Program Highlights

City programs, alongside efforts from a wide range of local, regional, state, and national partners, engaged and benefitted many residents and visitors during the 2022 warm season. A comprehensive evaluation of those programs to quantify the positive outcomes resulting from City investment, particularly with respect to avoided heat-related illnesses and deaths, is ongoing. Preliminary data demonstrating the scope and reach of a sample of programs are included below.

New Shelter at 28th Street and Washington Street

The City partnered with Maricopa County, St. Vincent de Paul, and Community Bridges, Inc., to operate a new shelter for people experiencing homelessness. The 200-bed shelter was operating at full capacity throughout the summer season, providing protection from high temperatures for shelter residents, and connections to a full complement of wraparound services.

Temporary Cooling Structures Near Human Services Campus

The City partnered with the Human Services Campus to provide additional cooling options for people experiencing homelessness outside of the Campus property. A fully enclosed cooling tent, complete with generator-powered mechanical cooling, operated daily from mid-June through the end of September, near the intersection of 9th Avenue and Jackson St. There were approximately 40 people who used this tent each day, which offered a safe place for extended rest and respite, as well as bottled water. An open-air tent with evaporative coolers was installed near the intersection of 12th Avenue and Madison St. This tent primarily saw shorter stays and was a water distribution location.



We're Cool Heat Relief Outreach

The City amplified and refined the focus of its direct heat relief outreach efforts last summer. A major process improvement was the inclusion of PHX Cares case managers on outreach shifts focusing on the unsheltered community. The outreach season spanned May 1 to October 1. Key program measures include:

- 91 outreach shifts completed (75 street outreach, 16 at trailheads)
- 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 distributed



This initiative was recognized by the U.S. Environmental Protection Agency as one of ten exemplary heat communication and outreach campaigns across the country through the Let's Talk About Heat challenge.

Arizona Heat Resilience Work Group

Multiple City departments participated in biweekly meetings of the Arizona Heat Resilience Work Group this summer. The work group exists to share data, best practices, and lessons learned about heat response efforts across Arizona to help advance statewide coordination and accelerate action. Meeting participants include local, county, state, and federal government officials, local non-profits, faith-based institutions, academic and research partners, and community advocates. City staff serve on the steering committee for the work group.

Supply Distribution to Local Non-Profits

In response to community requests and City Council guidance, the Office of Heat Response and Mitigation partnered with Volunteer Programs and the Finance Department to implement a new heat relief supply distribution program for summer 2022. Through this program, 50 local non-profit and charitable organizations received more than 38,000 individual items that were distributed to community members in need. Recipient organizations included Andre House, Community Bridges, Inc., Arizona Hugs for the Houseless, Feed Phoenix, and Cleo Lewis Ministries.



Utility Assistance Funding

The Human Services Department provided critical utility assistance throughout the summer months to help residents cover costs for electricity, water, and gas service. Over the period January–August 2022, the City had provided more than \$7,200,000 in energy assistance funding to 6,623 households through the Emergency Rental Assistance and Low Income Home Energy Assistance Programs. Priority populations include seniors, disabled and/or medically involved persons, families with young children, and renters experiencing an imminent eviction crisis.

Media Engagement

The Communications Office coordinated the City’s response to dozens of media requests related to heat response programs and services. Media engagement provided an opportunity for staff to build local, national, and international awareness of the public health impacts of extreme heat, efforts to reduce those impacts led by the City of Phoenix and other partners, and ways for community members to contribute to heat outreach efforts. Sample media coverage of heat response efforts included:

- NBC12 News: Phoenix opens new shelter after record-high number of heat deaths (May)
- Popular Science: How US cities are preparing for more life-threatening heatwaves (June)
- NBC12 News: Phoenix’s heat relief teams take hands on approach to addressing heat and homelessness (July)
- PBS NewsHour: Phoenix tries to offset rising temperatures that pose health risks to the most vulnerable (July)
- Guardian: A day with America’s only dedicated heat team in the US’s hottest city (August)
- Newsy: Phoenix appoints first city funded heat office; goal: saving lives (September)
- USA Today: Climate change: Heat officers take on risks presented by extreme heat (September)
- Meet the Press Today: Here’s how Phoenix’s heat office is protecting the city from dangerously high temperatures (September)
- Grist: Can cities eliminate heat-related deaths in a warming world? Phoenix is trying (January 2023)
- NOVA: Featured in Weathering the Storm documentary (April 2023)



4. Goals

The Office of Heat Response and Mitigation has proposed three goals for the City's heat response efforts in summer 2023, following those proposed for 2022:

GOAL 1: Reduce the number of heat-associated deaths in the City of Phoenix compared to 2022.

Heat-associated deaths in Phoenix are those that occur to City residents with a place of injury in any location, or other cases with a place of injury in the City limits regardless of residency. Case data are collected and reported by MCDPH and are typically available in early spring the following year.

GOAL 2: Reduce the number of calls for service related to heat to the Phoenix Fire Department compared to 2022.

Service calls related to heat include those with a specific nature code for "heat" as well as other nature codes that have been shown to occur more frequently when hot weather occurs. Case data are collected and reported by the Phoenix Fire Department and are available within several weeks of the incidents.

GOAL 3: Collect evaluation data from 100% of programs and services included in the 2023 Heat Response Plan.

Evaluation data may include outcome and/or process measures, as well as qualitative feedback from program administrators, community partners, and/or those receiving City services. These data will be collected and aggregated by the Office of Heat Response and Mitigation to inform future planning and budget needs and should be collected by the end of calendar year 2023.

5. Networks and Partnerships

Successful implementation of heat response programs and services is enhanced by a wide network of partners. Examples of critical partnerships include those with the National Weather Service Phoenix Forecast Office, the Arizona Heat Resilience Work Group and Sustainable Cities Network, and the Maricopa Association of Governments and other institutions that coordinate and evaluate the regional Heat Relief Network.

National Weather Service (NWS) Phoenix Forecast Office

The local NWS forecast office is the primary source for historical and forecasted meteorological data that the City uses for heat response planning and analysis. The Office also issues Excessive Heat Watches and Excessive Heat Warnings using guidance from the experimental NWS HeatRisk product. The specific criteria that trigger Excessive Heat Watches or Warnings vary throughout the calendar year; lower temperatures trigger Watches or Warnings in the early and late parts of the warm season compared to thresholds for mid-summer. In 2022, Phoenix joined four other cities across the United States as a participant in a Heat and Equity Pilot Program, convened by the parent agency of NWS, the National Oceanic and Atmospheric Administration (NOAA). NOAA and NWS staff co-facilitated a two-day heat planning tabletop exercise with Phoenix regional stakeholders in February 2023.

Arizona Heat Resilience Work Group & ASU Sustainable Cities Network

The City of Phoenix is a steering committee member for the Arizona Heat Resilience Work Group, which is coordinated by ASU's Sustainable Cities Network. The Work Group provides a forum for a wide range of stakeholders working on different heat response programs and services to share updates, look for opportunities for program alignment, collaboratively address challenges, and hear best practices from national and international experts. The work group meets monthly in the cool season and biweekly in the warm season.

Maricopa Association of Governments and Heat Relief Network Partners

The Maricopa Association of Governments (MAG) leads the coordination of cooling centers and hydration stations that are critical components of the regional heat resilience portfolio. MAG serves as a centralized clearinghouse for on-boarding facilities into the network and listing facilities on a publicly accessible interactive web map. The Heat Relief Network is also supported by the Arizona Department of Health Services, Maricopa County Department of Public Health, Arizona State University, and the University of Arizona, who are conducting cooling center evaluations as part of the federally funded Building Resilience Against Climate Effects program.

6. Heat Response Programs and Services

The City of Phoenix will lead or play a significant role in the implementation of 31 heat response programs and services in 2023. These programs and services reflect a combination of existing programs that will continue to operate as in previous years, existing programs that have undergone revisions, and new programs implemented for summer 2023. Responsibility and support for these programs and services, including budget and staffing needs, is distributed across more than 15 different City departments and functions.

The Heat Response programs and services reflect attention to six priority focus areas:

1. Situational awareness at City Hall and real-time response
2. Public engagement, communications, and outreach
3. Publicly accessible cool space and drinking water
4. Supporting cool and safe home environments
5. Supporting cool and safe mobility and recreation
6. Supporting cool and safe workplaces and schools

A table showing the complete inventory of the programs and services in these focus areas is printed on the following page. Subsequently, more details are provided about each program, organized by focus area.

City of Phoenix Heat Response Programs and Services – Summer 2023			
Initiative	Target population	Lead department(s)	Status
FOCUS AREA 1. Situational awareness at City Hall and real-time response			
1.1 First responder services	ALL	FIRE, PD	CONTINUED
1.2 Reciprocal relationship with 3-1-1 and 2-1-1	ALL	OHRM, 311	CONTINUED
1.3 Real-time monitoring of weather and health data with Arizona Heat Resilience Work Group	ALL	OHRM	CONTINUED
1.4 Enhancing heat response resources for first responders	ALL	OHRM, PD	CONTINUED
1.5 Pilot program with Google leveraging search data for public health	ALL	OHRM	CONTINUED
1.6 Weekly status reports	CITY DEPTS, PARTNER ORGS	OHRM	CONTINUED
FOCUS AREA 2. Public engagement, communications, and outreach			
2.1 Multi-platform Heat Safety Messaging	ALL	COMMS, OHRM	REVISED
2.2 We're Cool Volunteer Program	UNSHELTERED, HIKERS	VOL, OHRM, FIRE	REVISED
2.3 Cool Callers Volunteer Program	LIVING ALONE, LIMITED COOLING	VOL, OHRM	REVISED
2.4 Youth Heat Safety Workbook	YOUTH	OHRM, LIBRARY, OAC	NEW
2.5 Heat Relief and Opioid Education	SUBSTANCE USERS	PH, OHRM, OHS	NEW
2.6 Heat Relief Supplies to Community Partners	UNSHELTERED, HIKERS	OHRM, VOL PHX, OHS	CONTINUED
FOCUS AREA 3. Publicly accessible cool space and drinking water			
3.1 Supporting the regional Heat Relief Network	ALL	OHRM, LIBRARY, PARKS, HSD	REVISED
3.2 Reusable water bottle pilot program	ALL	OHRM, PUBLIC WORKS	REVISED
3.3 Heat Relief Network Water Distribution	ALL	OHRM	REVISED
3.4 Shade and shelter enhancements at and near the Human Services Campus	UNSHELTERED	OHS	REVISED
3.5 Available, under development, and future shelters	UNSHELTERED	OHS	NEW
3.6 Implementation of mobile water unit	ALL	WATER, PUBLIC WORKS, OHRM	NEW
FOCUS AREA 4. Supporting cool and safe home environments			
4.1 Cooling ordinance	RENTERS	NSD	CONTINUED
4.2 Landlord tenant program	CITYWIDE	HSD	CONTINUED
4.3 Housing repair programs and weatherization	LOW-MODERATE INCOME	NSD	CONTINUED
4.4 Emergency utility assistance	LOW INCOME	HSD	CONTINUED
4.5 Suspension of water shutoffs	LOW INCOME	WATER	CONTINUED
4.6 Navigating utility disconnection rules	LOW INCOME	OHRM	CONTINUED

FOCUS AREA 5. Supporting cool and safe mobility and recreation			
5.1 Take a Hike, Do it Right	HIKERS	PARKS	CONTINUED
5.2 Adding shade structures at transit stops	TRANSIT USERS	TRANSIT	CONTINUED
5.3 Valley Metro Heat Safety Messaging	TRANSIT USERS	TRANSIT	REVISED
5.4 City pools	ALL	PARKS	REVISED
FOCUS AREA 6. Supporting cool and safe workplaces and schools			
6.1 City employee heat safety efforts	CITY EMPLOYEES	HR SAFETY	REVISED
6.2 Promoting ADHS School Heat Safety Toolkit	SCHOOLS	OHRM, COMMS	CONTINUED
6.3 Reducing and reporting workplace heat safety concerns through ADOSH	EMPLOYERS, EMPLOYEES	OHRM, COMMS	CONTINUED

Department key: OHRM – Office of Heat Response and Mitigation; PD – Police; COMMS – Communications; VOL – Volunteer Programs; OAC – Arts and Culture; HSD – Human Services; NSD – Neighborhood Services; PH – Public Health, EM – Emergency Management. Status key: NEW indicates new programs for 2023; REVISED indicates programs with significant changes from 2022; CONTINUED indicates programs that will operate largely unchanged from 2022 and/or operate on an ongoing basis year-round.

FOCUS AREA 1. Situational awareness at City Hall and real-time response

1.1 First responder services

Phoenix Fire and Police respond to many service calls for heat illness each summer and trained personnel provide appropriate emergency medical services as needed. The Fire Department’s Community Assistance Program staff intervene in relevant cases.

1.2 Reciprocal relationship with 3-1-1 and 2-1-1

The Office of Heat Response and Mitigation is collaborating with the City’s 3-1-1 program and the Arizona 2-1-1 service to help ensure that call center employees have sufficient information to respond to heat-related calls in a knowledgeable and timely manner. This partnership is also providing data to City staff regarding the number and nature of inquiries to these services, which can help inform program and messaging as the summer progresses. Staff will add a new widget to phoenix.gov/heat to help the public access free heat relief transportation through 2-1-1 and will promote the program through city media channels. Staff are also exploring opportunities to streamline heat-related requests made through the City’s 3-1-1 website.

1.3 Weather and health data tracking with Arizona Heat Resilience Work Group

City staff will be in regular dialogue with partners at the National Weather Service Phoenix Forecast Office, Arizona Department of Health Services, and Maricopa County Department of Public Health to stay up to date regarding current and forecast weather conditions and observed heat-health impacts from near-real time surveillance systems. City staff and these partners participate in biweekly calls through the Arizona Heat Resilience Work Group and are on mutual e-mail distribution lists.

1.4 Enhancing heat response resources for first responders

The Office of Heat Response and Mitigation is collaborating with the Phoenix Police Department to increase awareness of and access to heat response information for officers on patrol. Specifically, these units are working to distribute more information about community cooling resources to patrol units in relevant precincts and are exploring opportunities to integrate information about cooling center and hydration station locations into in-vehicle computer systems.

1.5 Pilot program with Google leveraging search data for public health

City staff remain engaged with Google and researchers from Boston University, the University of Arizona, and Arizona State University to pilot test the application of specialized Google search insights data to improve heat response programs. Google will be providing staff a customized data set for preliminary testing in May 2023; feedback from the pilot will inform the development of public-facing tools.

1.6 Weekly status reports

The Office of Heat Response and Mitigation will compile and circulate a weekly report to all department and function leads with highlights of heat response program and service implementation, recommendations for program modifications (where warranted) and summaries of available weather and health data. The format and content of this report has been updated for 2023 based on feedback from city staff and external partners.

FOCUS AREA 2. Public engagement, communications, and outreach

2.1 Multi-platform Heat Safety Messaging and Media Engagement

Heat safety and resource information is shared through print and digital communication channels, including social media. Staff also support the distribution of heat safety information from media partners by participating as subject matter experts in requested interviews. The City hosts multiple websites with heat safety information and links to related resources, including phoenix.gov/heat and phoenix.gov/summer. The Communications Office and Office of Heat Response and Mitigation continually collaborate with other departments to evaluate and improve messaging.



New heat safety messaging partners for summer 2023 include VisitPHX (interactive recreation suggestions), Valley Metro (audio messages at transit platforms, resource cards for security staff, digital and physical messaging), and Sky Harbor Airport (heat safety public service announcement by Mayor Gallego). The City is a key partner for Arizona Heat Awareness Week (May 1–5). The Let’s Talk Heat educational booklet created by the Office of Arts and Culture for summer 2022 continues to remain available online at www.LetsTalkHeat.org.

2.2 We’re Cool Volunteer Program

City of Phoenix staff and volunteers will conduct direct heat relief outreach in areas of the city with higher numbers of unsheltered individuals and at highly used City trailheads. Trained volunteers are equipped to distribute maps and directions to public cooling centers and hydration stations, water (including refillable water bottles), and other heat relief supplies. This year’s program will be enhanced with the support of a new HeatReadyPHX outreach van, outfitted by the Public Works Department.

Volunteers will be joined by Homeless Solutions staff on shifts in targeted areas with unsheltered individuals to ensure that access to a wider suite of community resources is immediately available. The Office of Emergency Management will assist in the development of daily Event Operation Plans to ensure operational coordination among city staff, public safety, and outreach volunteers. This program anticipates the commitment of 40 volunteers to support more than 80 outreach shifts in summer 2023. Volunteer groups working with the We’re Cool program this year will include the Phoenix Community Emergency Response Team (CERT), ASU Edson College of Nursing and Health Innovation, APS, Maricopa County Medical Reserve Corps. The Office of Heat Response and Mitigation has revised the outreach schedule, locations, and protocol for this year based on feedback from internal and external partners.

2.3 Cool Callers Volunteer Program

Volunteers trained by City staff will conduct telephone-based wellness checks on a regular basis for residents who opt into the Cool Callers outreach program. Volunteers will ask residents questions about their health status and if their home is adequately cooled, and will be prepared to refer residents to the city’s emergency utility program, weatherization program, cooling centers and hydration stations, services available from utility companies, and emergency medical services as necessary. Volunteers are provided basic cell phones with voice and text capabilities from the City for contacting participants. The goal for this pilot program is to reach 300 community members for summer 2023 with a pool of at least 20 volunteers.

2.4 Youth Heat Safety Activity Book

The Office of Heat Response and Mitigation is working with Office of Arts and Culture and Phoenix Public Library staff to design and distribute a heat safety activity book. City staff partnered with Arizona State University to develop age-appropriate curriculum and a local artist was commissioned for the graphic design. The activity book, geared toward students in first through third grade, is an educational guide to promote awareness about staying safe during the summer heat. 1,000 copies are anticipated to be printed and distributed to the public.

2.5 Public Health Heat Relief and Opioid Education

The Office of Heat Response and Mitigation and the Public Health Office are collaborating to find opportunities to integrate opioid education and response and harm reduction initiatives into heat response programs and services. Efforts planned for summer 2023 include opioid safety and response training for outreach volunteers and partnerships with local harm reductions agencies to improve collective awareness of resources and best practices.

2.6 Heat Relief Supplies to Community Partners

The Office of Heat Response and Mitigation will partner with the Finance Department and Office of Volunteer Programs to distribute heat relief supplies to regional non-profits this summer, following a successful launch of this initiative in 2022. This initiative is supported with American Rescue Plan Act funding and is projected to allocated more than 30,000 individual items to a wide range of partnering organizations that provide direct heat relief and respite services to the community.

FOCUS AREA 3. Publicly accessible cool space and drinking water

3.1 Supporting the regional Heat Relief Network

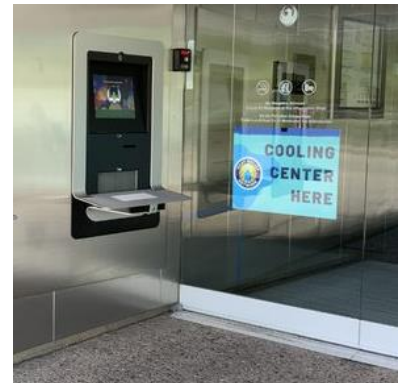
More than 50 City facilities operated by 3 different departments are expected to participate as cooling centers and/or hydration stations in 2023. All Heat Relief Network facilities will be categorized as one of three types for this summer based on collaborative discussion between City staff, MAG, and regional partners. Heat Relief Network site definitions for 2023 are as follows:

- Cooling Centers: Indoor, air-conditioned locations that offer hydration. *Example: Libraries or places of business that offer spaces to sit and distribute water.*
- Hydration Stations: Locations where individuals can go to receive bottled water and other collected donated items. These can be indoors or outdoors.

- Respite Centers: Indoor, air-conditioned locations that offer hydration and allow for uninterrupted rest, sitting, or lying down (depending on each facility) during hours of operation. *Example: Places of worship or facilities with the ability to allow visitors reasonable rest options.*

City facilities will operate as Cooling Centers and/or Hydration Stations only, and City staff will be prepared to refer those in need to Respite Centers as warranted. The specific role each City facility plays in the Heat Relief Network is determined through engagement with relevant departments, input from community partners, and analysis of heat-health impact data.

Phoenix's involvement represents about 1/3 of the total number of facilities participating in the regional Heat Relief Network. All participating City facilities are included on a publicly accessible interactive web map hosted by the Maricopa Association of Government and are listed on printed maps. The City will continue to distribute sandwich boards, window decals, yard signs, and vertical flags for Heat Relief Network facilities operated by the City and local partners, addressing a long-standing need for improved signage to help those in need identify publicly-accessible cooled space and drinking water.



3.2 Reusable water bottle pilot program

City staff will continue to pilot test the distribution of reusable water bottles through the We're Cool Program and other heat relief efforts to support the City's Zero Waste goals, building from a successful pilot in 2022. This year's bottles will feature customized printing with Phoenix-specific heat safety advice and resources. Approximately 10,000 reusable aluminum bottles will be distributed through this program in 2023; offsetting a portion of the waste from the ~500,000 single use plastic bottles distributed for regional heat relief efforts each summer.

3.3 Heat Relief Network water distribution

The Office of Heat Response and Mitigation will coordinate the distribution of single-use plastic water bottles to City facilities and community partners participating in the Heat Relief Network in summer 2023. Staff anticipate distributing more than 100,000 bottles of drinking water this year.

3.4 Shade and shelter enhancements at and near the Human Services Campus

Multiple investments made in the past 24 months will provide additional shade and shelter to individuals experiencing homelessness at and in the proximity of the Human Services Campus. These investments include three shade and cooling tents equipped with evaporative coolers on and around the Human Services Campus during the summer. Drinking water accessibility has also improved via the chilled water station available next to the Respiro Sprung Structure on Jackson Street and an additional station will be available in May at the tent on 9th Avenue south of Jackson Street. Water is also available from any of the 17 campus partner facilities during operational hours.

3.5 Available, under development, and future shelters

There are 1,575 shelter beds available to, or prioritizing, unsheltered adults around the Human Services Campus for summer 2023. The Office of Homeless Solutions is working with multiple partners to create additional shelter beds to meet the growing needs of safe, indoor places for people to sleep. Upcoming capital investments related to homeless shelters will result in an additional 462 shelter beds in 2023 and 340 new shelter/transitional beds are anticipated to be added in 2024. The City continues to pursue opportunities to operate additional facilities for daytime Heat Relief in or near downtown Phoenix in partnership with Maricopa County. In addition, the Office of Homeless Solutions will work with a nonprofit service provider to offer daytime heat respite and wrap around services at the Sunnyslope Family Services Center

3.6 Launch of City of Phoenix Mobile Water Unit

The City Water Department and Public Works Department have collaborated to design and procure a mobile drinking water unit with refrigeration that can be transported to community events and heat relief efforts. The tank should be operational by summer 2023 and will support heat relief efforts at outreach locations. Each refill of the mobile water unit provides the equivalent of 4,400 bottles of drinking water.

FOCUS AREA 4. Supporting cool and safe home environments

4.1 Cooling ordinance

The Neighborhood Services Department enforces the City's cooling ordinance, which sets minimum temperature requirements for cooling systems in all single and multi-family rental housing units. Every rental housing unit must be capable of safely cooling all habitable rooms to 86°F if cooled by evaporative cooling and 82°F if cooled by air conditioning.

4.2 Landlord Tenant program

The Human Services Department operates a Landlord Tenant program that provides educational services and information to landlords and tenants on their rights under the Arizona Residential Landlord and Tenant Act, including those related to cooling.

4.3 Housing repair programs and weatherization

The Neighborhood Services Department operates housing repair programs for the City, including the Home Weatherization Program. Home repair and weatherization investments can dramatically improve residents' ability to have adequately cooled indoor environments. In 2022, City Council allocated American Rescue Plan Act funding to augment the City's weatherization efforts.

4.4 Emergency utility assistance

The Human Services Department helps provide utility assistance for Phoenix residents through Family Service Centers. The utility assistance program has been significantly expanded in recent years with the availability of federal Covid relief funding.

4.5 Suspension of water shutoffs

The City will continue to operate an innovative low-flow water service program to accommodate customers having difficulty paying their water bills for a period of up to three months. This program allows residents to continue to receive water for basic needs including hydration while resolving challenges with bill payment. Customers will be directed to phoenix.gov/resources for assistance with their bill.

4.6 Navigating utility disconnection rules

The Arizona Corporation Commission adopted new policies in 2021 concerning utility disconnection among regulated providers in Arizona. In the City of Phoenix, electricity service is provided by both Arizona Public Service (APS) and Salt River Project (SRP), each of whom have different disconnection rules. Staff will continue to work across departments and with the 3-1-1 call center to ensure clear communication with residents about what the rules are and how to work with utilities to avoid disconnection where possible.

FOCUS AREA 5. Supporting cool and safe mobility and recreation

5.1 Take a Hike, Do it Right

The Parks and Recreation Department's "Take a Hike, Do it Right" campaign provides consistent messaging regarding heat and trail safety measures with large signage at city trailheads and parallel messaging on city websites and social media feeds. Parks rangers are trained in heat illness symptom recognition and make frequent direct

contact with trail users during the summer months to ensure adequate preparedness. On days with temperatures exceeding 110°F, rangers are deployed to selected popular trailheads to provide additional heat safety messaging to residents. Where possible, water is provided in 5-gallon coolers to help hikers refill personal water bottles. The Parks Board voted in October 2021 to close the summit trails at Piestewa Peak and Camelback Mountain between 11am and 5pm on days for which the National Weather Service has issued an Excessive Heat Watch; Parks staff enforces these trail closures. Parks Stewards, Camelback Navigators and We're Cool volunteers support staff in providing heat safety messaging and resources throughout the summer months at select trailheads. Parking lot entrances at select trailheads have extended hours during the summer months to promote hiking during cooler parts of the day. Dogs are prohibited from all City of Phoenix trails when temperatures reach 100°F.

5.2 Adding shade structures at transit stops

The Public Transit Department will continue to install shade structures at City bus stops with funding from the T2050 initiative. Since 2018, 512 new shade structures have been installed. The Public Transit Department and Office of Arts and Culture have engaged local industrial designers and artists to develop new types of shade structures to deploy at city bus stops and other places for pedestrian respite.

5.3 Valley Metro Heat Safety Messaging

Valley Metro and the Office of Heat Response and Mitigation are partnering to increase heat safety messaging for public transit users. New and improved initiatives for summer 2023 include heat relief resource cards for contracted security staff, social media messaging, kiosk posters, pop-up messaging in the Valley Metro app, and audio messaging at platforms. With support from the City of Phoenix Transit and Light Rail Departments, Valley Metro continues to improve the ability for transit system users to monitor bus and train movements in real time, which enables them to spend less time outdoors waiting for services.

5.4 City pools

The Parks and Recreation Department operates a network of public pools throughout the city that provide heat relief and safe summer recreational opportunities for residents. Recruitment bonuses were offered for summer 2023 to increase the number of lifeguards on staff, in response to shortages in previous years that constrained pool access. The Departments' "Kool Kids" program reduces or eliminates cost barriers to enter select city pools for Phoenix youth.

FOCUS AREA 6. Supporting cool and safe workplaces and schools

6.1 City employee heat safety efforts

Human Resources Safety collected information from all city departments regarding their hot weather protocol for outdoor workers. Heat safety materials and resources are provided according to department-specific practices and crew supervisors and management adjust work schedules and work intensity as warranted by weather conditions. Additionally, staff participated in completing HR heat safety training in preparation for the summer 2023 season. Information on cooling centers, hydration stations, signs and symptoms of heat exhaustion, and heat stroke were covered.

6.2 Promoting ADHS School Heat Safety Toolkit

City staff will help promote the Arizona Department of Health Services School Heat Safety toolkit to schools in Phoenix. The toolkit is part of the state health department's Heat Illness Prevention School Project, and aims to educate students, school staff, coaches, and parents, regarding heat illness symptoms and appropriate preventative measures. The toolkit includes several print and digital engagement materials as well as planning documents for school personnel for improving design of the built environment and implementing safe activities during the warm season.

6.3 Reducing and reporting workplace heat safety concerns through ADOSH

The Office of Heat Response and Mitigation and Communications Office will share resources with city businesses and employees from the Industrial Commission of Arizona and Arizona Department of Occupational Safety and Health. Two key resources include training that ADOSH staff can provide for heat stress prevention and forms for reporting workplace safety concerns. The Office of Heat Response and Mitigation will also invite feedback regarding workplace heat safety via voicemail and e-mail to help the City contribute to the ongoing federal rulemaking process related to occupational heat safety.

7. Future Needs and Opportunities

City departments and functions, as well as external partners, have identified several opportunities to improve heat response services and programs in Phoenix that are not fully reflected in the 2023 Heat Response Plan. Some concepts for future improvements require further logistical planning, conversations with community partners, new financial resources, and/or additional creativity and innovation. Staff will continue exploring these and other concepts for implementation, and will be working to acquire the necessary resources to make them possible. The City welcomes additional community input on priority directions for future heat response planning.

Expanded public drinking water access: More public drinking fountains, water bottle filling stations, and other accessible sources of potable water could help reduce risks of heat related illness, encourage more active and public transportation during the warm season, and reduce the need for single-use plastic water bottles for heat relief.

Backup power capacity at cooling centers: Community resilience against shocks associated with power outages is particularly important during the summer months in Phoenix, as electricity and air conditioning are critical lifelines for many residents. As established community resources for helping keep people cool during the summer months, cooling centers may be a logical target for infrastructure investment for backup power systems. The City requested funding to expand backup power capacity at cooling centers through a FEMA Building Resilient Infrastructure and Communities grant in January 2023 and is awaiting a decision.

Real time weather information at Phoenix trailheads: Digital displays with real-time weather information and heat safety messaging may help improve awareness of the risk of heat illness while using City hiking trails and the necessary precautions for engaging in vigorous physical activity on hot days.

More overnight and weekend cooling access: Many cooling centers and hydration stations in the Heat Relief Network are not open at night and have reduced or no capacity on the weekends. Adding new facilities to the network that can operate during these times will help meet community need.

Managing financial risks associated with heat: The City continues dialogue with partners to explore the potential benefits of entering into insurance-like contracts that could provide emergency financial assistance during periods of extreme heat, help the City and partners more confidently invest in heat response and mitigation solutions, and/or mitigate financial risks the City and partners are exposed to related to extreme heat.

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For more information about City of Phoenix Heat Response and Mitigation initiatives:

<https://www.phoenix.gov/heat>

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