

CITY OF PHOENIX WEEKLY HEAT RESPONSE UPDATE

MONDAY, JULY 11, 2022

REVIEWING MONDAY, JULY 4–SUNDAY, JULY 10

Summary

Temperatures transitioned from below-normal to above-normal over the previous week and are expected to remain above seasonal normals through the upcoming week. Daily high temperatures are forecast to consistently reach or exceed 110°F. After the Excessive Heat Warning that was in effect for Monday, July 11 expires, no additional warning days are expected for the week, but temperatures will be close to warning thresholds.

The pace of heat-related calls to the Phoenix Fire Department continues to trend slightly **below** the pace from 2021. The Maricopa County Department of Public Health confirmed 7 additional heat-related deaths in their most recent report, bringing the total for 2022 to 13. Heat relief supplies are continuing to be distributed to community organizations with more than 35,000 items allocated to date. The City's We're Cool outreach has surpassed 1,500 individual contacts.

I. RECENT AND YEAR-TO-DATE WEATHER CONDITIONS

After a seasonably mild start to July, temperatures pushed well above climatological averages last week. Temperatures exceeded 110°F for the first time in nearly three weeks on Friday, July 8, and daily highs continued to exceed 110°F through the weekend. After the previous week, the average temperature for warm season 2022 (April 1 to present) continues to be slightly cooler than the same period in 2021 (by 0.1°F) and is now 3.1°F higher than the climatological normal.

	Daily High °F	Normal High °F	vs. Normal °F	Daily Low °F	Normal Low °F	vs. Normal °F
Mon 7-4	105	106.9	-1.9	84	83.5	0.5
Tues 7-5	105	106.9	-1.9	87	83.7	3.3
Weds 7-6	107	106.9	0.1	84	83.9	0.1
Thurs 7-7	107	106.9	0.1	84	84	0
Fri 7-8	112	106.9	5.1	87	84.2	2.8
Sat 7-9	112	106.9	5.1	87	84.3	2.7
Sun 7-10	113	106.9	6.1	89	84.4	4.6

HOT DAYS AND NIGHTS TRACKER

	Year to Date (2022)	Year to Date (2020)	Normal Year to Date
100°F days	50	57	44.0
110°F days	9	16	8.7
85°F nights	17	9	8.5

Notes: Year to Date statistics for 2020 are included as a point of comparison to the hottest summer in the recorded history of Phoenix by most climatological measures. Normal is defined based on the 1991–2020 time period.

HEAT WARNING TRACKER

No Excessive Heat Warnings were in effect last week. An Excessive Heat Warning was issued last week that is in effect for July 11. As of July 10, there have been 6 days with Excessive Heat Warnings this year, the fewest to date since 2019. Excessive Heat Warnings have now been issued in the month of July for seven consecutive summers and 10 of the previous 11.

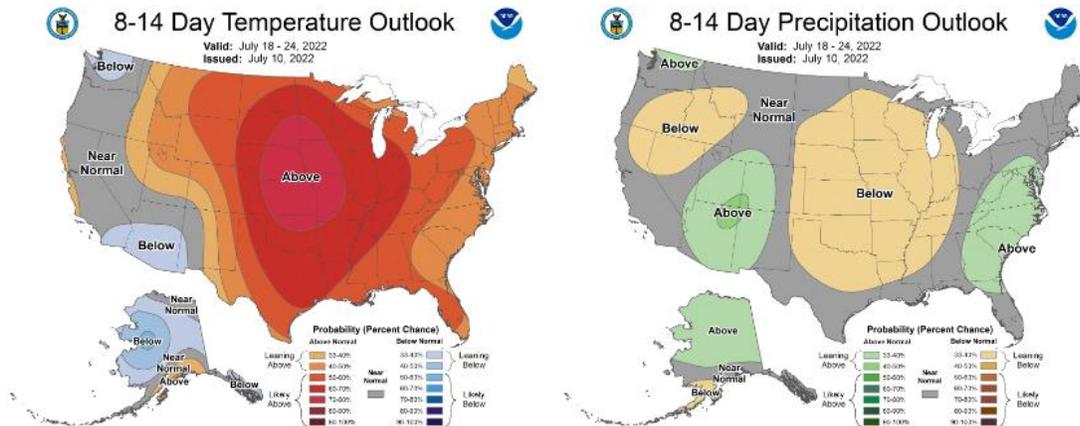
2. NATIONAL WEATHER SERVICE FORECAST

An Excessive Heat Warning is in effect for Monday, July 11, with temperatures on the upper edge of the Moderate HeatRisk Category. Temperatures will remain several degrees above climatological normals through the remainder of the week, but are forecast to remain below warning thresholds. Storm and precipitation chances modestly increase through the week.

Mon	Tue	Wed	Thu	Fri	Sat	Sun
114	112	112	111	111	111	110
91	91	91	91	90	89	89

No risk.	Risk to those extremely sensitive to heat.	Risk to those sensitive to heat.	Risk to most people.	Risk to everyone.
None	Low	Moderate	High	Very High

The early forecast for the following week favors below average temperatures and above average chances for precipitation. The average daily high for July 18–24 in Phoenix is approximately 106°F.



3. HEAT-HEALTH DATA

HEAT-RELATED MORTALITY AND MORBIDITY

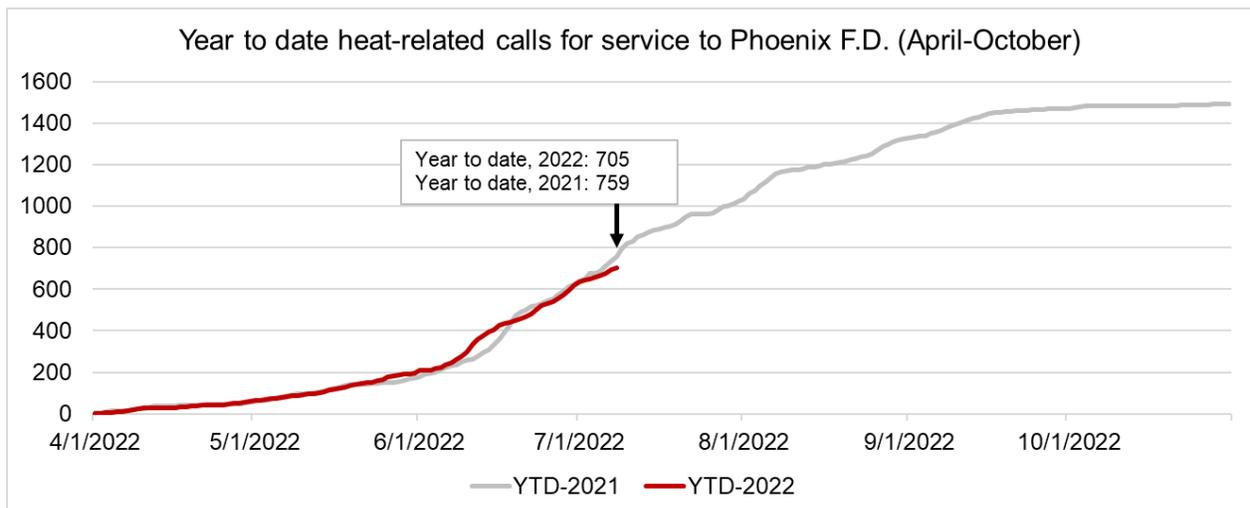
The Maricopa County Department of Public Health is reporting 13 confirmed heat-associated death for 2022, an increase of 7 cases from the previous reporting period. As of their July 2 report, there are 92 additional cases under investigation, an addition of 17 cases from the prior week. MCDPH heat-health reports are available online: <https://www.maricopa.gov/1858/Heat-Surveillance>.

HEAT-RELATED CALLS FOR SERVICE TO PHOENIX FIRE DEPARTMENT

The Phoenix Fire Department responded to 57 calls for service identified by the dispatcher to be related to heat between July 4 and July 8*. Advanced life support systems were deployed for 14 of the 57 calls. In 2021, the same 5-day period had 85 calls for service related to heat, with slightly higher temperatures (average high temperature of about 109°F in 2021 vs about 107°F in 2022). The highest daily number of calls between July 4 and July 8 occurred on Thursday, July 7 (high of 107°F), with 15 heat-related calls, which was less than the daily maximum number of calls the previous week (24 calls). June 19 had the most heat-related calls last year with 43, with a high temperature of 116°F. (Note: heat dispatch call data typically do not reflect mountain rescues related to overheating and/or dehydration).

*NOTE: The reporting period for fire department calls in this week's report only includes the five days from July 4 – July 8, based on data availability.

Year to date, heat-related calls for service to the Phoenix Fire Department are now running approximately **7% lower** than 2021.

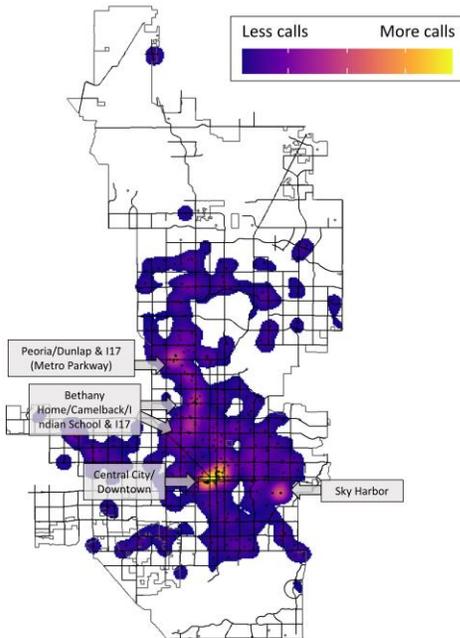


Spatially, over the period June 1–July 8, 2022, heat-related calls for service have been concentrated in a few areas: Central City/Downtown, Sky Harbor airport, and along the I-17 from Indian School Rd to Peoria Ave, with a distinct hotspot in the Metro Parkway area between Peoria Ave and Dunlap Ave. Between July 4 and July 8, two distinct hotspots occurred near Indian School Rd between 83rd Ave & 91st Ave and near 7th St & Osborn.

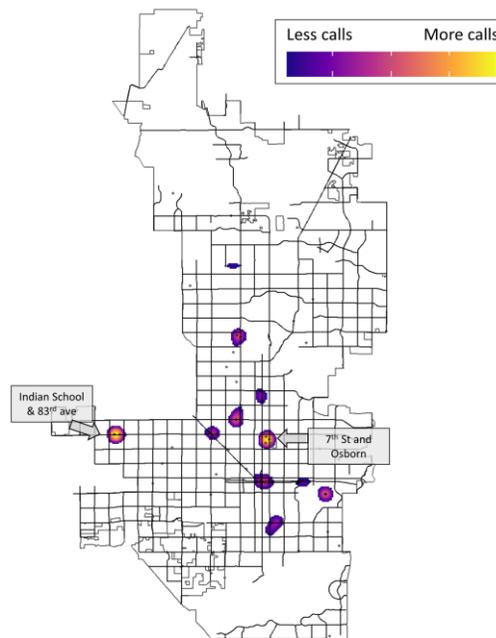
June 1 – July 8

Last week (July 4 – July 8)

Map of Phoenix Fire Department calls for service related to heat June 1 – July 8, 2022
 *Note: Point locations are approximated based on partial addresses or cross streets.



Map of Phoenix Fire Department calls for service related to heat July 3 – July 8, 2022
 *Note: Point locations are approximated based on partial addresses or cross streets.



4. COMMUNITY SEARCH DATA

PHOENIX 3-1-1

There were 6 inquires made through Phoenix 3-1-1 for July 4–July 8 that were related to summer heat, a decrease of 5 calls from the week prior. Two were related to City aquatics, two were related to private pools, and two were related to residential cooling. Staff are following up on the residential cooling calls for possible referral to the landlord tenant program.

ARIZONA 2-1-1

There were 288 requests for electrical utility assistance fielded by Arizona 2-1-1 over the previous week in Maricopa County, which was a slight decrease from the week prior.

GOOGLE SEARCH

Google staff members are preparing a prototype customized dashboard for monitoring heat-health impacts and search queries related to heat for the City of Phoenix that will be tested and evaluated this summer. Publicly available Google Trends data for Arizona showed an uptick in searches for heat warnings, coincident with the timing of the Excessive Heat Warning from the National Weather Service. Searches for heat stroke and swimming pools trended down, and there is no clear recent trend in searches for heat illness, air conditioning, or cooling centers.

5. STATUS OF HEAT RESPONSE PROGRAMS AND SERVICES

Program status indicated by color in status column. Updates are provided in the right-hand column as relevant to program planning and implementation.

	Fully operational (24 programs)
	Partially operational (2 programs)
	Planning and preparation (5 programs)
	No action to date (0 programs)
	No information available (0 programs)

City of Phoenix Heat Response Programs and Services – Summer 2022				
Initiative	Target population	Lead depts.	Status	Updates
FOCUS AREA 1. Situational awareness at City Hall and real-time response				
1.1 First responder services	ALL	FIRE, PD		Normal operations.
1.2 Reciprocal relationship with 3-1-1 and 2-1-1	ALL	OHRM, 311		More search terms and customized analysis will be added in future reports. Staff are following up on selected 311 calls.
1.3 Real-time monitoring of weather and health data with AZ Heat Resilience Work Group	ALL	OHRM		Normal operations. The work group meets biweekly on Thursday afternoons during the summer with participation from multiple city departments.
1.4 Enhancing heat response resources for first responders	ALL	OHRM, PD		Planning continues with OHRM and PD staff.
1.5 Pilot program with Google search data for public health	ALL	OHRM		Pilot dashboard in development. Additional planning conversations were held during the last week of June.
1.6 Weekly status reports	CITY DEPTS	OHRM		Tenth report distributed July 10.
FOCUS AREA 2. Public engagement, communications, and outreach				
2.1 Multi-platform Heat Safety Messaging	ALL	COMMS, OHRM		Summer safety messaging has transitioned to full operational mode and includes new content produced by the Communications team this year.
2.2 We're Cool Volunteer Program	UNSHeltered, HIKERS	VOL, OHRM, FIRE		38 outreach shifts have been completed, with 32 focusing on street outreach and 6 at City trailheads. More than 1500 contacts have been made through this program. Supplies distributed include water, hats, sunscreen, cooling center maps, heat safety cards, cooling towels, misters, and umbrellas. Community

				volunteer onboarding and engagement continues to increase.
2.3 Cool Callers Volunteer Program	LIVING ALONE, LIMITED COOLING	VOL, OHRM		Multiple referrals to other City and regional services have been made through the first two weeks of phone calls. Enrollment of additional participants and volunteers continues.
2.4 Let's Talk Heat Booklet	ALL	A&C		Booklets are available for distribution, and a digital version is available on the City website (link available below).
2.5 Investments in Cooling Center Signage	ALL	OHRM, VOL		New signs for cooling centers are being distributed to City facilities and community partners through multiple channels, including the Cooling Center Response Network platform.
2.6 Heat Relief Resource Distribution	ALL	OHRM, VOL		The inventory of heat relief supplies is being restocked and fulfillment of recent orders has resumed. 40 organizations have been allocated supplies with more than 35,000 individual items committed. Over the past week, 10 fridge/freezers and 30 shade canopies were included in allocations.
FOCUS AREA 3. Publicly accessible cool space and drinking water				
3.1 Supporting the regional Heat Relief Network	ALL	OHRM, LIBRARY, PARKS, HSD		56 City facilities are participating as cooling centers or hydration stations. Staff from multiple departments are supporting Heat Relief Network participation, including managing water distribution. Staff are filling requests from community organizations for printed maps showing locations of nearby cooling centers and hydration stations.
3.2 Reusable water bottle pilot program	ALL	OHRM, PUBLIC WORKS		Staff are continuing to distribute bottles from an initial inventory of 5,000 reusable aluminum water bottles through the We're Cool Program. A qualifying bid for a larger order has been secured through an RFQ.
3.3 Shade and shelter enhancements at and near the Human Services Campus	UNSHELTERED	HSD		Staff implemented a new cooling tent at 9 th Avenue and Jackson on June 11 that will operate through the summer, and continue to explore opportunities to improve cooling and water access in this area. Intermittent challenges with the cooling system at the new tent have been addressed and resolved in a timely manner by staff and contractors.
3.4 New shelter at 28 th St. and Washington St.	UNSHELTERED	HSD		The shelter is fully operating with high demand and use.
3.5 Provision of portable water tanks	ALL	WATER, OHRM		Staff continue to explore viable options and possible funding sources; Public Works is leading the procurement process in collaboration with other departments including Water and OHRM.
FOCUS AREA 4. Supporting cool and safe home environments				
4.1 Cooling ordinance and landlord tenant program	RENTERS	NSD, HSD		Normal operations.
4.2 Housing repair programs and weatherization	LIMITED HOME COOLING	NSD		Normal operations. Staff continue to develop neighborhood prioritization criteria for expansion of home weatherization with ARPA funding and are exploring collaborative opportunities with NOAA.
4.3 Emergency utility assistance	LOW INCOME	HSD		Normal operations.
4.4 Suspension of water shutoffs	LOW INCOME	WATER		Normal operations.
4.5 Navigating utility disconnection rules	LOW INCOME	OHRM, COMMS		Web content has been disseminated through City platforms and channels. OHRM and 311 staff reviewed existing rules at the start of summer to ensure accurate communication to residents.

FOCUS AREA 5. Supporting cool and safe mobility and recreation				
5.1 Take a Hike, Do it Right	HIKERS	PARKS		Normal operations. Piestewa Peak and Camelback summit trailheads have closed during Excessive Heat Warnings, as planned.
5.2 Adding shade structures at transit stops	TRANSIT USERS	TRANSIT		Normal operations.
5.3 Valley Metro real-time transit tracking	TRANSIT USERS	TRANSIT		Normal operations.
5.4 ARPA-funded transit passes	NON-PROFIT ORGS AND THEIR CLIENTS	TRANSIT		Normal operations.
5.5 City pools	ALL	PARKS		City pools have opened for summer 2022.
5.6 SunBlock Umbrella Distribution	ALL	A&C		Sun umbrellas featuring 14 designs from local artists have been delivered and are ready for distribution at public events.
FOCUS AREA 6. Supporting cool and safe workplaces and schools				
6.1 City employee heat safety efforts	CITY EMPLOYEES	HR SAFETY		Normal operations.
6.2 Promoting ADHS School Heat Safety Toolkit	SCHOOLS	OHRM, COMMS		Messaging content is being prepared to share for the start of the 2022-2023 school year later this summer.
6.3 Reducing and reporting workplace heat safety concerns	EMPLOYERS, EMPLOYEES	OHRM, COMMS, HR SAFETY		Messaging content is being prepared to share throughout the summer, staff are planning cross-departmental meeting to discuss engagement with state agencies including ADHS and ADOSH.

Department key: OHRM – Office of Heat Response and Mitigation; PD – Police; COMMS – Communications; VOL – Volunteer Programs; A&C – Arts and Culture; HSD – Human Services Department; NSD – Neighborhood Services Department.

6. HEAT RESPONSE PROGRAM HIGHLIGHT

The Office of Arts and Culture and Arizona State University's Urban Climate Research Center partnered to produce the sunBLOCK public art projects. The projects, that were partially funded by the National Endowment for the Arts, were created as part of a campaign to promote awareness about heat and sun safety. sunBLOCK included the production of an educational booklet, *Let's Talk Heat*. The booklet provides information about urban and extreme heat, health risks, and strategies to cool the city and keep people safe. sunBLOCK also included the *Walk in the Sun Umbrella Artwork Design Contest*. Through the contest fourteen Arizona artists were commissioned to design the fabric canopies for personal shade umbrellas. Images of two of the winning designs are shown to the right of the text. Staff are working with the Council Offices and Office of Heat Response and Mitigation to distribute umbrellas and booklets to the public.



7. REGIONAL AND NATIONAL HIGHLIGHT

The City of Los Angeles appointed its first Chief Heat Officer in early June, joining Phoenix and Miami as cities with dedicated personnel addressing challenges associated with hot weather. Marta Segura was appointed to the post after serving as Los Angeles' Director of Climate Emergency Mobilization. Experts from the University of Arizona and Arizona State University, as well as City of Phoenix staff, provided guidance to Los Angeles to craft the new position.

8. HEAT SAFETY – DID YOU KNOW?

A wide range of medications, including some commonly used antihistamines and beta blockers, have known side effects that can impair the body's ability to cope with high temperatures. People starting new medications in the summer are advised to take extra precautions when exposed to the heat before understanding how their body responds. Certain medicines hinder the body's thermal sensation and regulation mechanisms, inhibit sweating, and/or accelerating sweating. A 2020 Washington Post story provides perspectives from a pediatrician with expertise in heat and health: https://www.washingtonpost.com/health/risks-for-some-medications-rise-as-temperatures-climb/2020/06/25/0ba887e4-ae90-11ea-856d-5054296735e5_story.html. Questions about heat sensitivity and medications should be directed to medical professionals.

KEY WEBSITES

[City of Phoenix Office of Heat Response and Mitigation](#)

[City of Phoenix Let's Talk Heat Booklet](#)

[City of Phoenix Heat Relief Supply Request Form for Community Organizations](#)

[National Weather Service Phoenix Forecast Office Heat Page](#)

[Maricopa Association of Governments Heat Relief Network](#)

[Maricopa County Department of Public Health Heat-Health Surveillance Program](#)

[Arizona Department of Health Services Climate and Health Program](#)

Questions about this report may be directed to David Hondula, Director of Heat Response and Mitigation: david.hondula@phoenix.gov.