

CITY OF PHOENIX WEEKLY HEAT RESPONSE UPDATE

TUESDAY, JUNE 21, 2022

REVIEWING MONDAY, JUNE 13-SUNDAY, JUNE 19

Summary

Variability dominated regional weather conditions over the past week. Near-normal conditions to start the week gave way to a brief hot spell with temperatures eclipsing 110°F for two consecutive days. However, the week ended with temperatures well below normal, with some locations in the metropolitan area recording measurable precipitation. Near-normal conditions dominate the upcoming forecast period.

Heat-related calls to the Phoenix Fire Department were significantly reduced last week but still averaged more than 10 per day. This reduction helped bring year-to-date calls **below** the pace from 2021. Several additional suspected heat-related deaths were added to the Maricopa County records. 2-1-1 call data showed a considerable increase in inquiries related to electrical utility assistance. 25 of the City's 31 heat response programs and services are fully or partially operational.

I. RECENT AND YEAR-TO-DATE WEATHER CONDITIONS

A wide range of temperatures were observed over the previous week, peaking at 113°F on Thursday before daily highs dipped well below normal over the weekend. The daily low of 90°F on Monday, June 13 marked the third time this year that temperatures have not dropped below 90°F at night. After the previous week, the average temperature for warm season 2022 (April 1 to present) is now comparable to the same period in 2021 (0.04°F warmer). Summer to date temperatures are 3.7°F higher than the climatological normal for the same period.

	Daily High °F	Normal High °F	vs. Normal °F	Daily Low °F	Normal Low °F	vs. Normal °F
Mon 6-13	108	104	4	90	77.9	12.1
Tues 6-14	105	104.2	0.8	82	78.2	3.8
Weds 6-15	107	104.5	2.5	81	78.5	2.5
Thurs 6-16	113	104.7	8.3	81	78.8	2.2
Fri 6-17	111	104.9	6.1	90	79.1	10.9
Sat 6-18	98	105.1	-7.1	82	79.4	2.6
Sun 6-19	101	105.3	-4.3	79	79.7	-0.7

HOT DAYS AND NIGHTS TRACKER

	Year to Date (2022)	Year to Date (2020)	Normal Year to Date
100°F days	29	36	24.0
110°F days	6	5	2.2
85°F nights	5	3	0.7

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

An Excessive Heat Warning was in effect on Thursday, June 16, marking the 6th Excessive Heat Warning day of the season. Last summer, Excessive Heat Warnings were in effect for 9 days in the month of June. The record for Excessive Heat Warning days in June is 14, set in 2017.

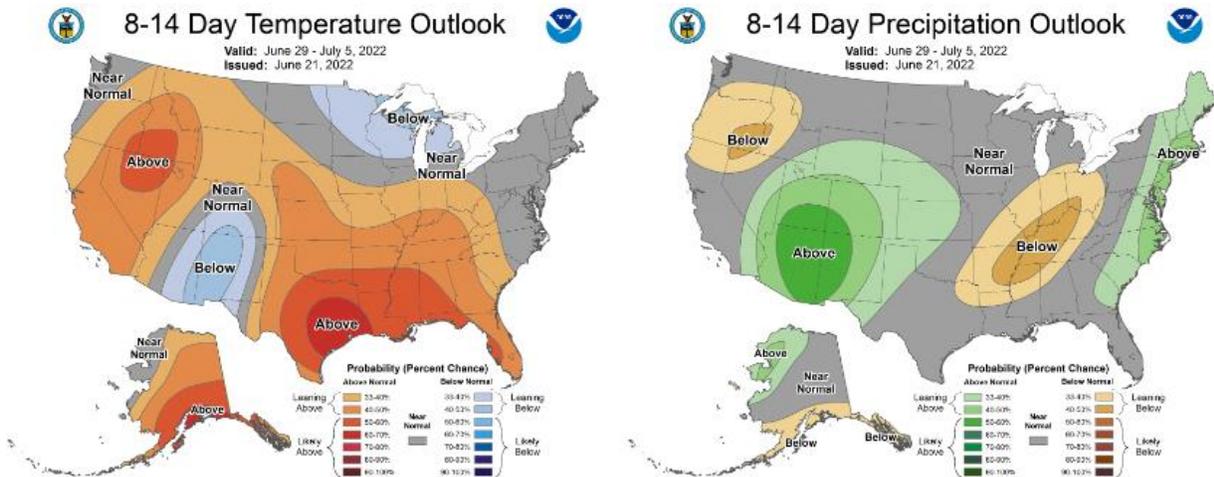
2. NATIONAL WEATHER SERVICE FORECAST

Moderate Heat Risk is in the forecast for every day of the upcoming week with daily high temperatures between 104°F and 110°F, largely in line with climatological normals. Increasing moisture and cloud coverage will suppress daytime high temperatures but potentially elevate nighttime temperatures.

Tue	Wed	Thu	Fri	Sat	Sun	Mon
107	107	110	107	108	105	104
86	88	88	87	86	86	85

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 (June 29–July 5) suggests that near-normal temperatures will continue, as well as conditions favorable for above-average precipitation.



3. HEAT-HEALTH DATA

HEAT-RELATED MORTALITY AND MORBIDITY

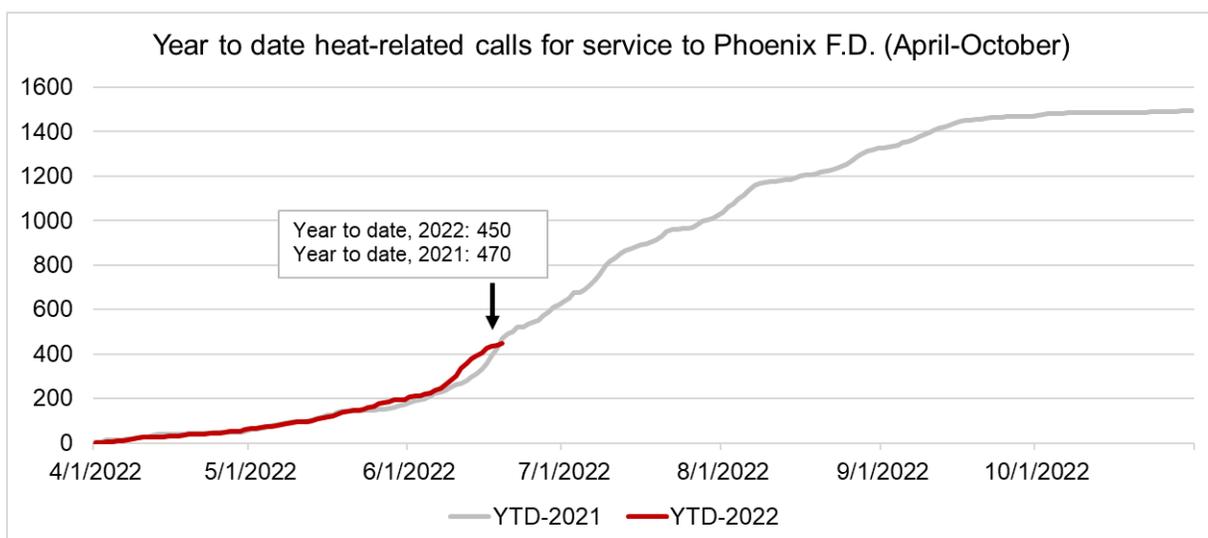
The Maricopa County Department of Public Health is now reporting 4 confirmed heat-associated death for 2022, an increase of 3 from the previous reporting period. As of their June 11 report, there are 44 additional cases under investigation, an addition of 15 cases from the prior week. MCDPH heat-health reports are available online:

<https://www.maricopa.gov/1858/Heat-Surveillance>.

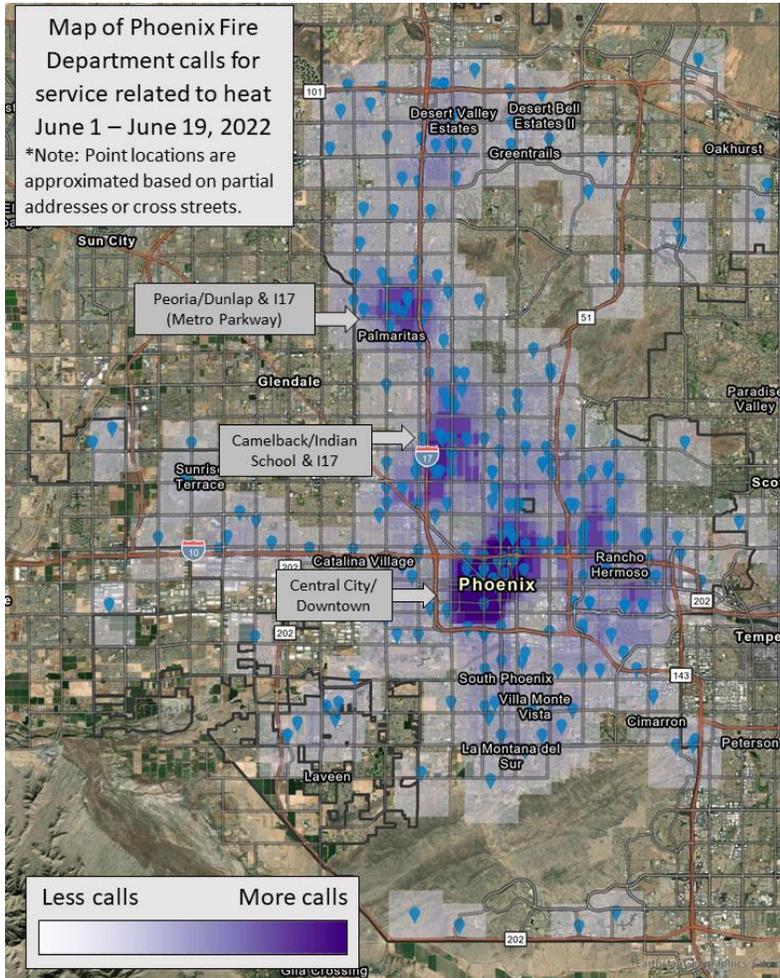
HEAT-RELATED CALLS FOR SERVICE TO PHOENIX FIRE DEPARTMENT

The Phoenix Fire Department responded to 91 calls for service identified by the dispatcher to be related to heat over the previous week. This represented a decrease of 45 cases (33%) below the week prior. Advanced life support systems were deployed for 30 of the 91 calls. In 2021, the same 7-day period had 191 calls for service related to heat, with considerably higher temperatures (average high temperature of 115°F in 2021 vs average high temperature over the previous week of 106°F). The highest daily number of calls over the previous week occurred on Monday June 13 (high of 108°F) and Thursday June 16 (high of 113°F), with 19 heat-related calls on each day, representing a significant decrease (50%) over the daily maximum number of calls last week. 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).

Year to date, heat-related calls for service to the Phoenix Fire Department are now running approximately 5% **lower** than 2021.



Spatially, for the month of June to date (through June 19), heat-related calls for service have been concentrated in three areas: Central City/Downtown (primarily west of Central Ave), east of the I-17 between Camelback Rd and Indian School Rd, and west of the I-17 between Peoria Ave and Dunlap Ave.



4. COMMUNITY SEARCH DATA

PHOENIX 3-1-1

There were 10 resident inquiries made through Phoenix 3-1-1 for the period June 13–June 17 that were related to summer heat, a decrease of 6 calls from the week prior. Topics of interest spanned a wider range than in previous weeks. Calls concerned trail closures, home repair programs, landlord tenant issues related to cooling, heat illness symptoms, and contact information for the Office of Heat Response and Mitigation.

ARIZONA 2-1-1

Requests for electrical utility assistance fielded by Arizona 2-1-1 increased once again over the previous week, with 346 calls placed in Maricopa County. This represented more than a 60% increase from the week before.

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 a year-to-date peak in searches for heat illness on June 16, but searches related to heat stroke, air conditioners, heat warnings, and swimming pools declined from the week prior. There remains no clear trend in searches for 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 (21 programs)
	Partially operational (4 programs)
	Planning and preparation (6 programs)
	No action to date (0 programs)
	No information available this week (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.
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 forthcoming.

1.6 Weekly status reports	CITY DEPTS	OHRM		Seventh report distributed June 21.
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		27 outreach shifts have been completed, with 22 focusing on street outreach and 5 at City trailheads. Nearly 1300 contacts have been made through this program. Supplies distributed include water, hats, sunscreen, cooling center maps, heat safety cards, cooling towels, misters, and umbrellas. Staff from OHRM, HSD, VOL, TRANSIT and FIRE, and volunteers from CERT have participated. New volunteers are joining shifts the week of June 20.
2.3 Cool Callers Volunteer Program	LIVING ALONE, LIMITED COOLING	VOL, OHRM		Members of the public are beginning to enroll in the program and initial calls are being made this week.
2.4 Let's Talk Heat Booklet	ALL	A&C		Booklets are being printed and are expected to ready for distribution at community events soon. 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 **NEW** Heat Relief Resource Distribution	ALL	OHRM, VOL		Distribution of heat relief supplies to community organizations continues this week. More than 30 organizations have been allocated supplies with more than 28,000 individual items committed.
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.
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.
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.
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. Additional ARPA funding to expand home weatherization was approved by City Council. NSD and OHRM staff held a planning meeting to develop neighborhood prioritization criteria.
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 is being prepared to disseminate through City platforms and channels. OHRM and 311 staff have reviewed existing rules 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		Umbrellas are being manufactured using designs sourced from a public art competition. Delivery is anticipated in June.
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 throughout the 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

New Heat Safety Communications: The Communications Office spearheaded an effort to generate new heat safety messaging to disseminate on social media platforms and other channels for the summer season. This new content has been deployed on department-specific and the City of Phoenix main social media accounts over the past few weeks, in response to the onset of hot conditions. Staff from multiple departments, including Fire, Parks and Recreation, and Heat Response and Mitigation, participated as on-camera talent. Search for the new content using #PHXSummer and #PHXHeat.



7. REGIONAL AND NATIONAL HIGHLIGHT

Academic partners at Arizona State University and the University of Arizona recently submitted a \$25 million research



U.S. DEPARTMENT OF
ENERGY

Office of
Science

proposal to the U.S. Department of Energy Urban Integrated Field Laboratories Initiative. Department of Energy program goals are to support “new observational, modeling, and simulation studies to improve the accuracy of community-scale climate research and inform equitable climate solutions to minimize adverse impacts caused by climate change. Research will focus on three tightly related scientific topics—atmospheric and environmental observations; modeling of climate change and impacts across urban regions; and simulating the climate benefits of deploying climate solutions and technologies in historically underserved communities across the U.S.” The submission led by ASU and the University of Arizona focuses on regional challenges including extreme heat, air pollution, and water resources, and was titled “Southwest Urban Corridor Integrated Field Laboratory.” The City of Phoenix would be a collaborating partner on this research initiative, if funded. A decision is expected later this calendar year.

8. HEAT SAFETY – DID YOU KNOW?

This week brings the anniversary of the all-time high temperature observation at Phoenix Sky Harbor Airport. The record of 122°F was set on June 26, 1990. There are only three days in the recorded history of Phoenix with temperatures at or above 120°F (June 25-26, 1990, and July 28, 1995). The current forecast for June 26, 2022, calls for temperatures nearly 20°F lower than the record.

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](#)

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