

CITY OF PHOENIX WEEKLY HEAT RESPONSE UPDATE

MONDAY, JULY 18, 2022

REVIEWING MONDAY, JULY 11–SUNDAY, JULY 17

Summary

Temperatures continued to persist well above seasonal normals, with Excessive Heat Warnings in effect for two of the previous seven days. High temperatures exceeding 110°F are likely to continue through Friday and there is a possibility of new Excessive Heat Warnings being issued.

Last week saw significant community impacts with a year-to-date high for daily (52) and weekly (243) heat-related calls to the Phoenix Fire Department. The pace of heat-related calls to the Phoenix Fire Department is now ahead of the 2021 year-to-date total by nearly 10%. The Maricopa County Department of Public Health is now reporting 17 confirmed heat-related deaths in 2022. Volunteer engagement with the We're Cool program continues to increase, with very generous participation from APS staff members in recent weeks. The We're Cool program has now reached more than 1,600 community members.

I. RECENT AND YEAR-TO-DATE WEATHER CONDITIONS

Temperatures above seasonal averages persisted through the previous week, with daily high temperatures consistently 4-8°F above normal. Nighttime lows were comparably warm relative to seasonal expectations, with the exception of the low temperature of 81°F on Sunday attributable to thunderstorm activity. This recent hot stretch pushed the year to date summer (April 1 to present) average high temperature back above the same period in 2021 (by 0.4°F), after several consecutive weeks running below last year's average. The summer to date daily high temperature is now 3.3°F higher than the climatological normal.

Red=highest high Blue=lowest high low breaks ties	Daily High °F	Normal High °F	vs. Normal °F	Daily Low °F	Normal Low °F	vs. Normal °F
Mon 7-11	115	106.8	8.2	91	84.5	6.5
Tues 7-12	112	106.8	5.2	93	84.6	8.4
Weds 7-13	113	106.8	6.2	93	84.7	8.3
Thurs 7-14	111	106.7	4.3	88	84.8	3.2
Fri 7-15	112	106.7	5.3	88	84.9	3.1
Sat 7-16	114	106.6	7.4	92	84.9	7.1
Sun 7-17	112	106.6	5.4	81	84.9	-3.9

HOT DAYS AND NIGHTS TRACKER

	Year to Date (2022)	Year to Date (2020)	Normal Year to Date
100°F days	57	64	50.5
110°F days	16	21	11.1
85°F nights	23	16	12.2

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

Excessive Heat Warnings were in effect on Monday, July 11 and Saturday, July 16, bringing the year to date total to 8 Excessive Heat Warning days. An Excessive Heat Warning that was issued for Sunday, June 17 was cancelled. The total of 8 Excessive Heat Warning days to date remains the fewest since 2019.

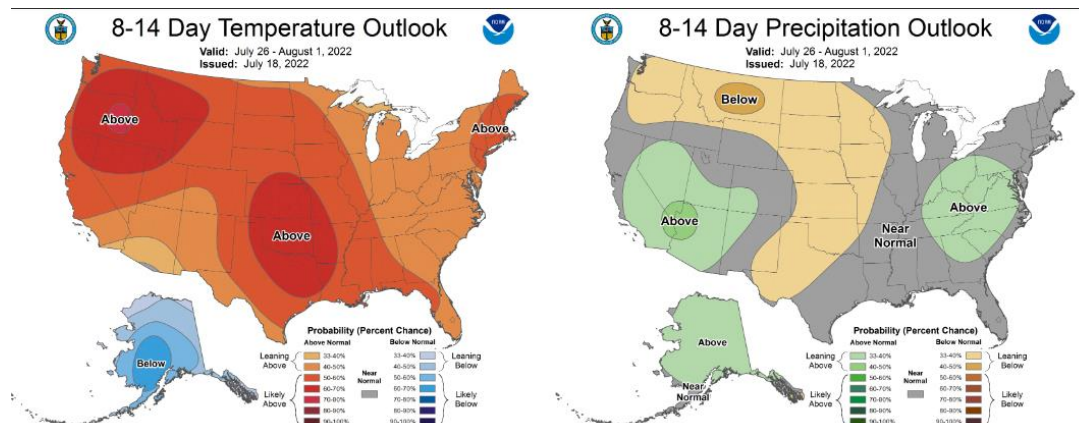
2. NATIONAL WEATHER SERVICE FORECAST

The upcoming forecast calls for above normal temperatures to continue through the end of the week. Temperatures will fluctuate between the Moderate and High HeatRisk categories, and if the forecast continues to trend toward higher temperatures, Excessive Heat Warnings may be issued. There are encouraging signs in the forecast of a shift to a wetter and more active monsoon pattern by early the following week.

Tue	Wed	Thu	Fri	Sat	Sun	Mon
112	111	111	112	108	105	104
91	90	91	91	87	86	

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 slightly favors above average temperatures, along with increased precipitation chances. The average daily high for July 25–31 in Phoenix is approximately 106°F.



3. HEAT-HEALTH DATA

HEAT-RELATED MORTALITY AND MORBIDITY

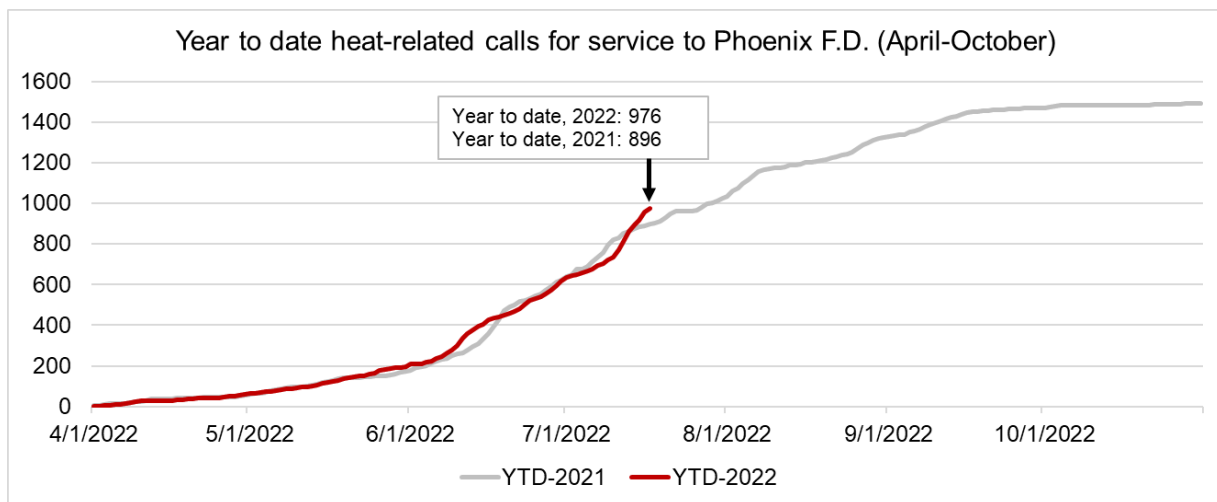
The Maricopa County Department of Public Health is reporting 17 confirmed heat-associated deaths for 2022, an increase of 4 cases from the previous reporting period. As of their July 9 report, there are 126 additional cases under investigation, an addition of 34 cases from the prior week. MCDPH heat-health 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 243 calls for service identified by the dispatcher to be related to heat over the previous week. This was a significantly higher number of calls than any previous week this year (the next highest occurred the week of June 6 with 136 calls), and significantly higher number of calls than the previous week (85 calls). Advanced life support systems were deployed for 81 of the 243 calls.

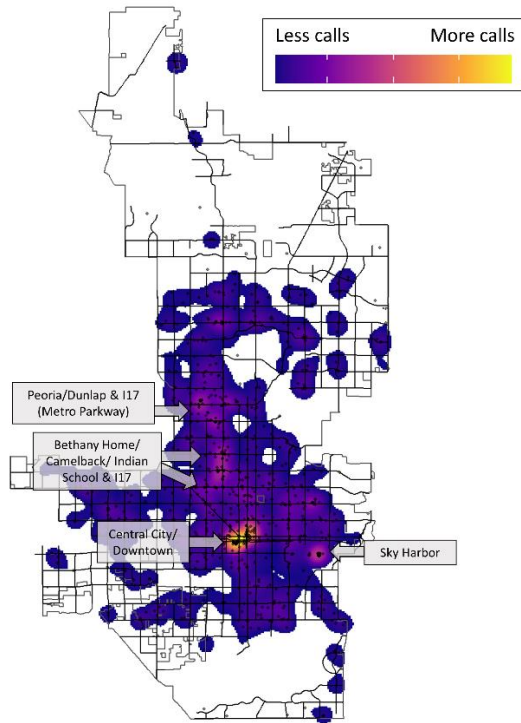
In 2021, the same 7-day period had 77 calls for service related to heat, with much lower high temperatures (average high temperature of about 104°F in 2021, compared to 113°F last week). The highest daily number of calls over the previous week occurred on Wednesday July 13 (high of 113°F), with 52 heat-related calls, which was significantly more than the daily maximum number of calls last week (17 calls), and the highest number of daily calls this year to date. 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 **9% higher** than 2021.



Spatially, since June 1, 2022 to date (through July 17), heat-related calls for service have continued to concentrate in a few areas: the Central City/Downtown area, Sky Harbor airport, and along the I-17 from Indian School Rd to Peoria Ave. Over the past week, the areas of concentration remained mostly the same. In both the past week and since June 1st, about half of all calls have occurred along the I-17, between Durango St and Bell Rd, and between 35th Ave and Central Ave.

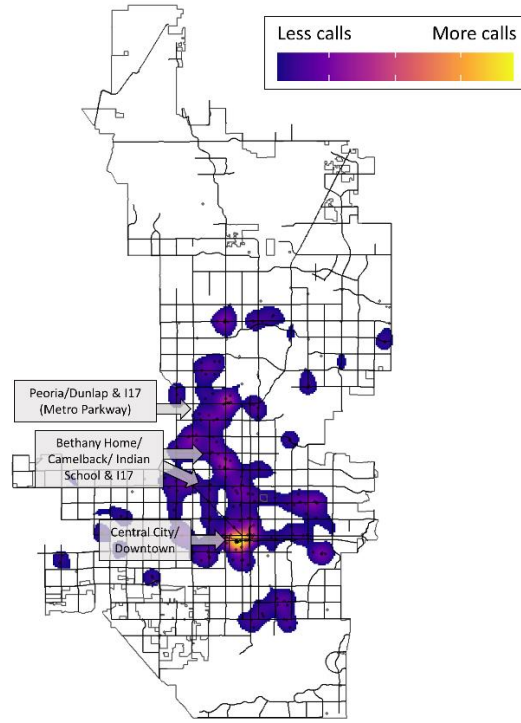
June 1 – July 3

Map of Phoenix Fire Department calls for service related to heat June 1 – July 17, 2022
 *Note: Point locations are approximated based on partial addresses or cross streets.



Last week (July 11 – July 17)

Map of Phoenix Fire Department calls for service related to heat July 11 – July 17, 2022
 *Note: Point locations are approximated based on partial addresses or cross streets.



4. COMMUNITY SEARCH DATA

PHOENIX 3-1-1

There were 8 inquires made through Phoenix 3-1-1 for July 11–July 15 that were related to summer heat, an increase calls from the week prior. Four calls were related to private swimming pools, two were related to the cool pavement program, one was related to trail closures, and one was related to tree maintenance.

ARIZONA 2-1-1

There were 302 requests for electrical utility assistance fielded by Arizona 2-1-1 over the previous week in Maricopa County, which was a slight increase 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, heat illness, heat stroke, and pools. Searches for air conditioning trended down slightly, and there was no apparent 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 (25 programs)
	Partially operational (1 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. Customized cooling center maps are being prepared for fire stations in highly impacted areas.
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		Eleventh report distributed July 17.
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		43 outreach shifts have been completed, with 37 focusing on street outreach and 6 at City trailheads. More than 1600 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 three 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.
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 are being addressed 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 to Council offices and are beginning to be distributed 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

In October 2021, the Phoenix Parks and Recreation Board voted to restrict access to certain hiking trails on the most dangerously hot summer days. Access to the summit trails at Piestewa Peak and Camelback Mountain is prohibited from 11:00 a.m. through 5:00 p.m. on days when the National Weather Service has an Excessive Heat Warning in Effect. Closures have been in effect on eight days thus far in summer 2022.

7. REGIONAL AND NATIONAL HIGHLIGHT

Recent thunderstorms caused significant power outages in several municipalities in Maricopa County. Preserving cold food is one of the challenges that households face during summertime power outages. Both SRP and APS offer reimbursement programs for ice purchased during power outages of 10 or more hours. The SRP program provides up to \$10 per customer, and the APS program reimburses for up to 40 pounds of ice. More information is available on the utility companies' websites by searching for "ice reimbursement."

8. HEAT SAFETY – DID YOU KNOW?

Heat stroke is a life-threatening medical emergency that requires immediate professional assistance. One of the key differentiating symptoms between heat exhaustion and heat stroke is that under heat stroke, the body has often stopped sweating and the skin has become red, hot, and dry. The diagram to the right provides a comparison between the symptoms of heat exhaustion and heat stroke. Heat exhaustion can often be treated without professional attention, but symptom of heat stroke always necessitates a call to 9-1-1. While waiting for help to arrive, cooling the victim by using damp cloths, ice packs, cold water immersion, misting, and providing shade are among the best ways to help.



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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