

CITY OF PHOENIX WEEKLY HEAT RESPONSE UPDATE

MONDAY, AUGUST 29, 2022

REVIEWING MONDAY, AUGUST 22–SUNDAY, AUGUST 28

Summary

An Excessive Heat Warning is in effect for the first time in more than a month and includes Tuesday and Wednesday. Temperatures are forecast to surpass 110°F on Tuesday and remain above seasonal normals through at least the Labor Day weekend. Every day in the forecast period presents Moderate to High HeatRisk, according to the National Weather Service.

Heat-related calls to the Phoenix Fire Department trended upwards last week to an average of ten per day. The total number of heat-related calls from 2021 is likely to be eclipsed in the upcoming week. The Maricopa County Department of Public Health confirmed 16 additional cases in their most recent report, bringing the annual total for the County to 82.

I. RECENT AND YEAR-TO-DATE WEATHER CONDITIONS

The previous week saw favorable conditions for monsoon rainfall and storms taper off, with temperatures returning to seasonal averages. Daily high temperatures were within 2°F of normal for each of the last four days; overnight lows trended slightly higher than the long-term averages. This summer (April 1 to present) is now approximately 0.6°F hotter than the same period in 2021, and 1.8°F higher than the climatological normal. The number of 100°F and 110°F days this year, as well as the number of 85°F nights, remained above average. As of Sunday, Phoenix had experienced 37 consecutive days without the high temperature reaching 110°F, a streak that is projected to end this week.

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 8-22	99	105	-6	77	83.3	-6.3
Tues 8-23	105	104.9	0.1	85	83.2	1.8
Weds 8-24	101	104.8	-3.8	84	83.1	0.9
Thurs 8-25	103	104.8	-1.8	84	83	1
Fri 8-26	106	104.7	1.3	87	82.9	4.1
Sat 8-27	106	104.6	1.4	86	82.8	3.2
Sun 8-28	104	104.5	-0.5	85	82.7	2.3

HOT DAYS AND NIGHTS TRACKER

	Year to Date (2022)	Year to Date (2020)	Normal Year to Date
100°F days	90	105	87.7
110°F days	20	50	19.5
85°F nights	38	50	32.4

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 issued last week, but one is now in effect for Tuesday, August 30 and Wednesday, August 31. If the warned period is confined to two days, the year-to-date total will be 12 warned days by the end of the upcoming week.

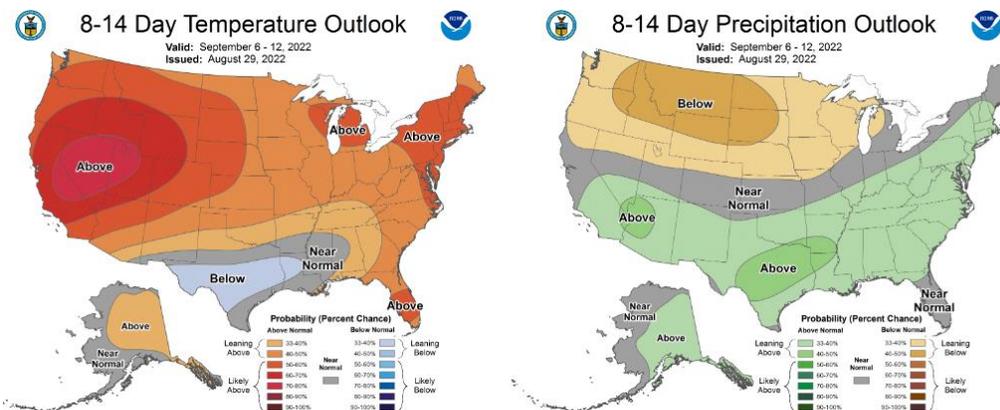
2. NATIONAL WEATHER SERVICE FORECAST

Above average temperatures and Moderate to High HeatRisk have returned to the forecast with a major shift in the regional weather pattern. Temperatures are expected to peak on Tuesday but remain high through the Labor Day weekend. Overnight lows will be particularly high and there is a reasonable chance that Tuesday night does not cool off below 90°F. Much of the western U.S. is forecast to be experiencing anomalous heat over the upcoming week.

Tue	Wed	Thu	Fri	Sat	Sun	Mon
111	108	107	106	108	107	106
88	86	85	86	86	84	

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 has the odds strongly favoring above-average temperatures, with a modest opportunity for precipitation activity. The normal daily high for the first full week of September is 103°F.



3. HEAT-HEALTH DATA

HEAT-RELATED MORTALITY AND MORBIDITY

The Maricopa County Department of Public Health is reporting 82 confirmed heat-associated deaths for 2022, an increase of 16 cases from the previous reporting period. As of their August 20 report, there are 265 additional cases under investigation, which is 3 cases lower than the week before. All MCDPH heat-health reports are available online:

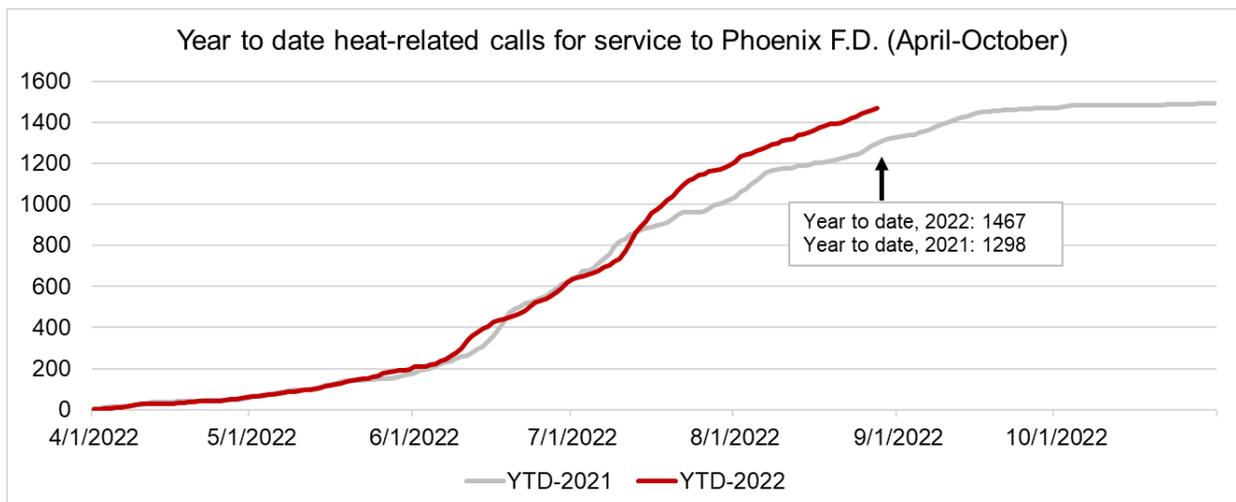
<https://www.maricopa.gov/1858/Heat-Surveillance>.

HEAT-RELATED CALLS FOR SERVICE TO PHOENIX FIRE DEPARTMENT

The Phoenix Fire Department responded to 70 calls for service identified by the dispatcher to be related to heat over the previous week. This was more than the number of calls as the week prior (55 calls, an increase of about 27%). Advanced life support systems were deployed for 26 of the 70 calls. In 2021, the same 7-day period had 75 calls for service related to heat, with somewhat higher temperatures (average high temperature of about 108°F in 2021 and 103°F in 2022).

The highest daily number of calls over the previous week occurred on Thursday, August 25 (high of 103°F), with 16 heat-related calls, which was more than the daily maximum number of calls last week (12 calls). June 19 had the most heat-related calls last year with 43, with a high temperature of 116°F. This year, to date, the highest number of heat-related calls occurred on July 13, with 52 calls and a high temperature of 113°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 13% **higher** than 2021, and the 2021 seasonal total of 1494 will likely be eclipsed in the upcoming week.

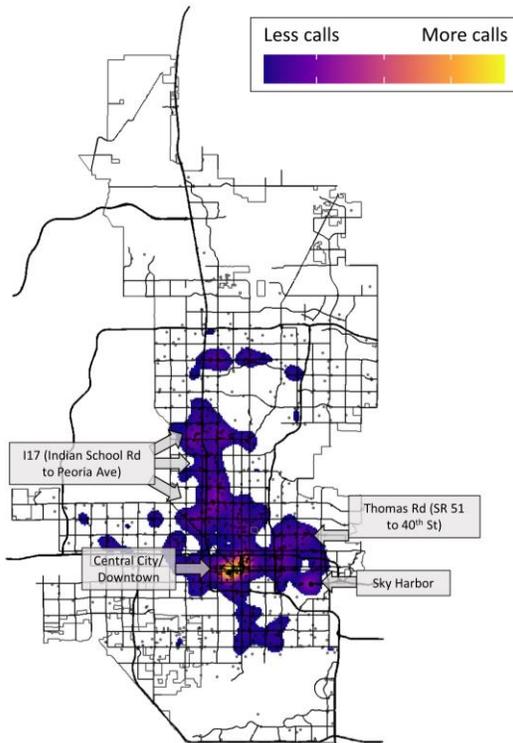


Spatially, since June 1, 2022 to date (through August 28), heat-related calls for service have continued to concentrate in a few areas: the Central City/Downtown area, Sky Harbor airport, and along the I-17 from Indian School Rd to Peoria Ave. Additionally, some more minor areas of concentration are present on Thomas Rd from State Route 51 to 40th St, around 24th St from Thomas Rd to Jefferson St, and near Central Ave between Camelback Rd and Thomas Rd.

Over the past week, calls were highly concentrated in the Central City/Downtown region, especially in the vicinity of the Human Services Campus. Additionally, a few hotspots occurred near the I-10 & Washington St, Indian School Rd & Grand Ave, Thomas Rd & 59th Ave, and Baseline Rd & 39th Ave.

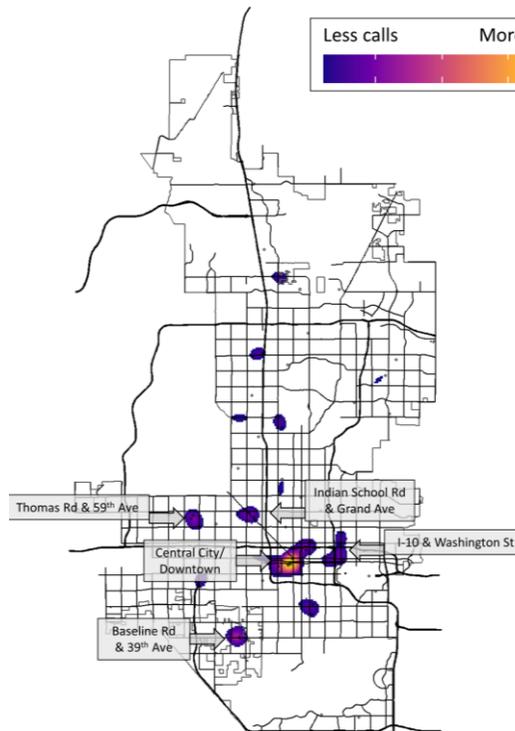
June 1 – August 28

Map of Phoenix Fire Department calls for service related to heat June 1 – August 28, 2022
*Note: Point locations are approximated based on partial addresses or cross streets.



Last week (August 22 – August 28)

Map of Phoenix Fire Department calls for service related to heat August 22 – August 28, 2022
*Note: Point locations are approximated based on partial addresses or cross streets.



A dynamic web map of call density from June 1 to August 28, 2022 is also available online:
<https://asu.maps.arcgis.com/apps/mapviewer/index.html?webmap=e8e87b3c56f4428fb6d74716d5066ba0>

4. COMMUNITY SEARCH DATA

PHOENIX 3-1-1

There were 4 inquires made through Phoenix 3-1-1 for August 22–26 that were related to summer heat, the same number as the prior week. There was one call for a landlord tenant concern, one call for a pool permit, and two heat-related media requests.

ARIZONA 2-1-1

There were 305 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 previous week.

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 later this summer. Publicly available Google Trends data for Arizona showed that searches for heat exhaustion and swimming pool trended slightly upward over the psat week, while searches for cooling centers, heat stroke, air conditioning, and heat warnings all trended downward or remained low.

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)
	Ended for summer 2022 (0 programs)

City of Phoenix Heat Response Programs and Services – Summer 2022				
Initiative	Target population	Lead depts.	Status	Updates
FOCUS AREA I. 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		Seventeenth report distributed August 29.
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		67 outreach shifts have been completed, with 56 focusing on street outreach and 11 at City trailheads. More than 2800 contacts have been made through this program. Supplies distributed include water, hats, sunscreen, cooling center maps, heat safety cards, cooling towels, misters, and umbrellas.
2.3 Cool Callers Volunteer Program	LIVING ALONE, LIMITED COOLING	VOL, OHRM		Call activity will be elevated this week in response to the Excessive Heat Warning. 6 volunteers are engaging 15 registered participants.
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		Order fulfillment is on hold while supplies are being restocked with heat relief kits from Maricopa County. 50 organizations have been allocated supplies with more than 38,000 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		55 City facilities are currently participating as cooling centers or hydration stations. One library location has been removed from the network for facility repairs. 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 larger order for summer 2023 is being prepared and staff will be exploring custom bottle designs to promote heat safety and City services.
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. An upgrade to the cooling system at the new tent was made in late July.
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 are reviewing public health and safety guidelines for proposed trailers with the health department.
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; 76 new shade structures installed thus far in calendar year 2022.
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		Pools have transitioned to weekend-only operation for the month of August, as scheduled.
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

Since January 2022, the City of Phoenix has assisted **6,623 households** with financial assistance toward current and outstanding electric, water and gas bills. Priority populations include seniors, disabled and/or medically involved persons, families with young children, and renters experiencing an imminent eviction crisis. **Over \$7,269,000 in energy assistance** has been distributed to Phoenix residents through the Emergency Rental Assistance (ERA) and Low Income Home Energy Assistance (LIHEAP) programs.

Utility Assistance Update

7. REGIONAL AND NATIONAL HIGHLIGHT



Two Arizona researchers have been recognized with an award from the American Planning Association for their recent report titled “Planning for Urban Heat Resilience.” Ladd Keith and Sara Meerow published the report in April 2022 with support from the National Oceanic and Atmospheric Administration, and it is [freely available online](#). As noted on the American Planning Association website the report “ provides holistic guidance to help practitioners increase urban heat resilience equitably in the communities they serve.” In reflecting on the award to ASU News, Dr. Meerow acknowledged heat-focused efforts across Arizona: “This award shows that planners in the state recognize the importance of planning for urban heat resilience.”

8. HEAT SAFETY – DID YOU KNOW?

The Camelback Mountain and Piestewa Peak summit trails will be closed from 11:00am to 5:00pm on Tuesday and Wednesday as a result of the Excessive Heat Warning issued by the National Weather Service. An ABC15 news segment on August 29 pointed to the trail closures as a possible contributing factor to a decreased number of mountain rescues on city hiking trails in 2022 compared to 2021. Extended parking hours (until 9:00pm) are in effect at these locations through the month of September to encourage recreation during cooler times of day.



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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