

2025 EXTREME HEAT AND HEALTH REPORT

COUNTY OF SAN DIEGO PUBLIC HEALTH PREPAREDNESS AND RESPONSE

SUMMARY

- The County of San Diego's Heat Plan was activated six times in 2025 in response to National Weather Service-issued heat watches and warnings across three climate zones
- Despite fewer heat events, the number of heat-related prehospital calls (247) continued to increase from previous years; however, patient acuity has improved slightly over the last five years
- Prehospital calls peaked during the mid hours of the day from 12:00 PM to 3:00 PM
- People aged 75 and over were around twice as likely to experience heat-related illness resulting in a prehospital call than other adult age groups
- Emergency departments saw elevated numbers of heat-related illnesses during the summer months
- Deaths from heat-related illness have steadily increased over the last two decades with 8 deaths in 2024
- The County Communications Office continues to provide timely and accurate information to residents on protecting themselves from heat illness, including information on finding a nearby Cool Zone

INTRODUCTION

Extreme heat is defined as temperatures that are much hotter and/or humid than average for a particular location and for the time of year. Extreme heat events are becoming more frequent due to the warming of our planet. Prolonged hot weather can cause dehydration and increase the body's core temperature, making it difficult for the body to function normally.

Heat-related deaths and illnesses are preventable, yet heat is the leading weather-related killer in the U.S.¹ During the heat seasons (May-September) of 2018 through 2024, there were 10,580 deaths caused by heat-related illnesses in the United States.²

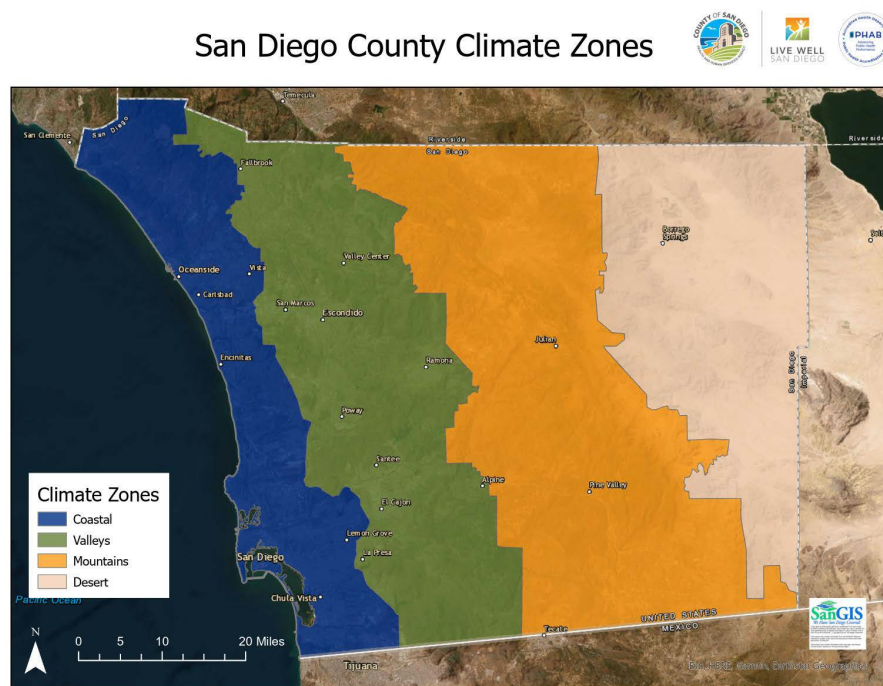
In an extreme heat event, the Public Health Preparedness and Response (PHPR) Branch of the County of San Diego Health and Human Services Agency is responsible for coordinating response efforts with other County departments and external partners to disseminate information relevant to the heat emergency to the public. San Diego County experienced six heat events during 2025, occurring between June and October. The tables and figures contained in this report show the number of heat events year-to-year; prehospital data and outcomes; medical encounter and death data; and the outreach efforts that County Communications Office (CCO) completed. An appendix is included with trended health data for the years through 2024. Data sources are described below.

DATA SOURCES

NATIONAL WEATHER SERVICE HEAT ALERTS

National Weather Service heat alerts, comprised of both heat watches and warnings, are issued across four distinct climate zones in the county (Figure 1). Any combination of simultaneous alerts triggers the activation of the County of San Diego's Heat Plan. Each Heat Plan activation is logged by the Public Health Preparedness and Response Branch and are collectively referred to as Heat Events.

FIGURE 1: NATIONAL WEATHER SERVICE CLIMATE ZONES IN SAN DIEGO COUNTY



PREHOSPITAL CALLS

Prehospital Care Record data are provided by the County's Emergency Medical Services (EMS) Office. One provider impression code, T67.0 (Hyperthermia/Heatstroke or Sunstroke), was used to pull heat-related calls. This method does not include calls that may have been heat-related but were coded with a different impression, e.g. syncope/near-syncope. Previous versions of this report (2023 and earlier) were prepared by extracting records using keyword search to capture additional heat-related calls, and only on heat event days (2024 and earlier). This report includes all T67.0 calls for the entire year, including days that were not under a heat event and/or are outside of the historical heat season as hot days are beginning to occur more frequently outside of these parameters.

EMERGENCY DEPARTMENT VISITS

Heat-related illness emergency department visits data are provided by the County’s Epidemiology and Immunization Services Branch. Records are pulled from emergency department surveillance reports and are included based on criteria patterned after the National Syndromic Surveillance Program definition of heat-related illness. Like the prehospital calls data, ED visit data are for the whole year and not subset to only heat event days.

EMERGENCY DEPARTMENT DISCHARGES, HOSPITALIZATIONS, AND DEATHS

Heat illness/injury emergency department discharges, hospitalizations, and deaths data are provided by the County’s Community Health Statistics Unit. Emergency department discharges and hospitalizations data come from the California Office of Statewide Health Planning and Development. ICD-10-CM codes: T6701XA, T6702XA, T6709XA, T670XXA, T671XXA, T672XXA, T673XXA, T674XXA, T675XXA, T676XXA, T677XXA, T678XXA, T679XXA, X30XXA, X32XXA.

Deaths data come from the California Department of Public Health (CDPH), Vital Statistics Death Statistical Master Files for California Department of Public Health, Injury and Violence Prevention Branch, 1991-2020, and the Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System, 2021-2024. ICD-10 codes: T670, T671, T672, T673, T674, T675, T676, T677, T678, T679, X30.

Data from these sources have a one-year lag in reporting. These data only include records falling within the Centers for Disease Control and Prevention’s definition of heat season of May through September.

To explore more of this data, including demographic information, please visit the Community Health Statistics Unit’s [Community Morbidity and Mortality Profiles](#) dashboards and filter by condition (Heat Illness/Injury) and outcome of interest.

HISTORICAL ASSESSMENT

In 2025, San Diego County was under a total of six National Weather Service-issued heat alerts (watches and warnings) that activated the County’s Heat Plan (Table 1).³

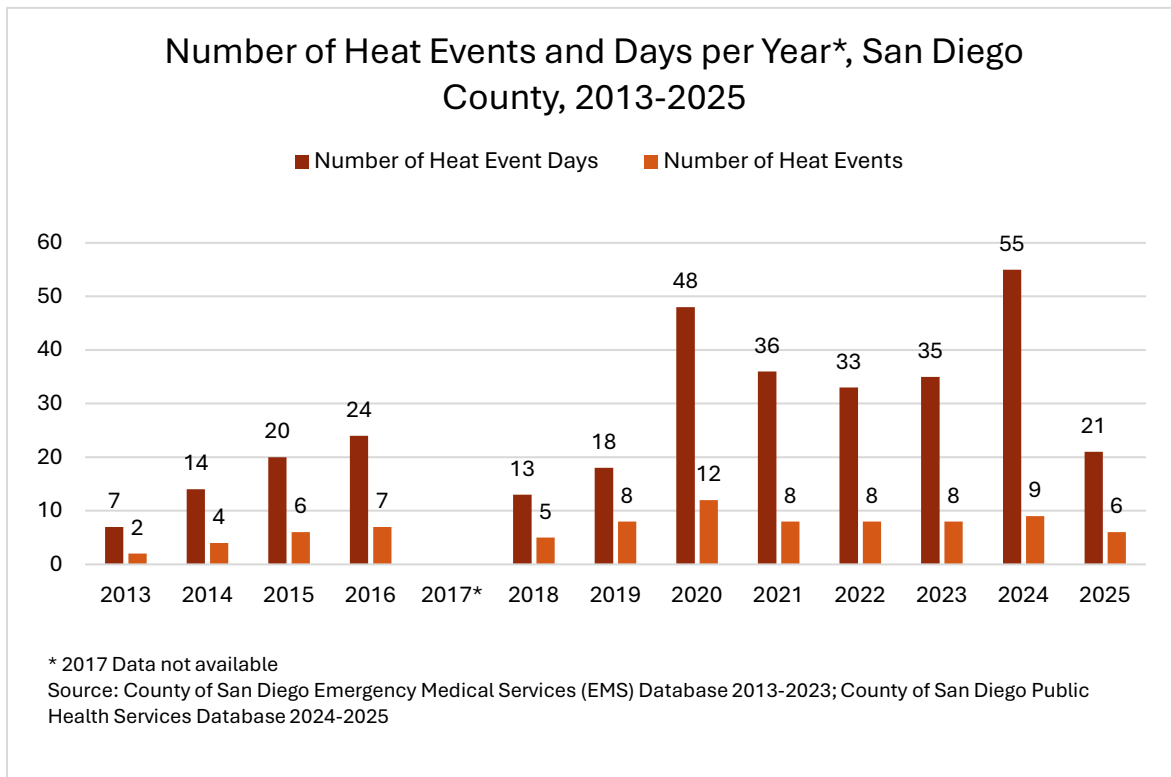
TABLE 1. 2025 HEAT PLAN ACTIVATIONS (HEAT EVENTS)

Annual Activation Number	Highest Activation Phase	Zones Affected	Activation Start Date	Activation End Date	Total Days
1	2	Mountains, Valleys	6/16/2025	6/18/2025	3
2	2	Deserts, Mountains, Valleys	7/9/2025	7/10/2025	2
3	2	Deserts, Mountains, Valleys	8/6/2025	8/13/2025	8

4	2	Deserts, Mountains, Valleys	8/20/2025	8/23/2025	4
5	2	Valleys	9/1/2025	9/2/2025	2
6	2	Valleys	10/28/2025	10/29/2025	2

There were 21 days spent in a heat event, a significant drop from the previous several years (Figure 2).

FIGURE 2. HEAT EVENTS AND HEAT DAYS BY YEAR



Most heat event days took place in the month of August, with 12 total heat event days that month (Table 2). All heat events took place between June and October for a total of 21 days.

TABLE 2. DAYS IN HEAT EVENT BY YEAR AND MONTH

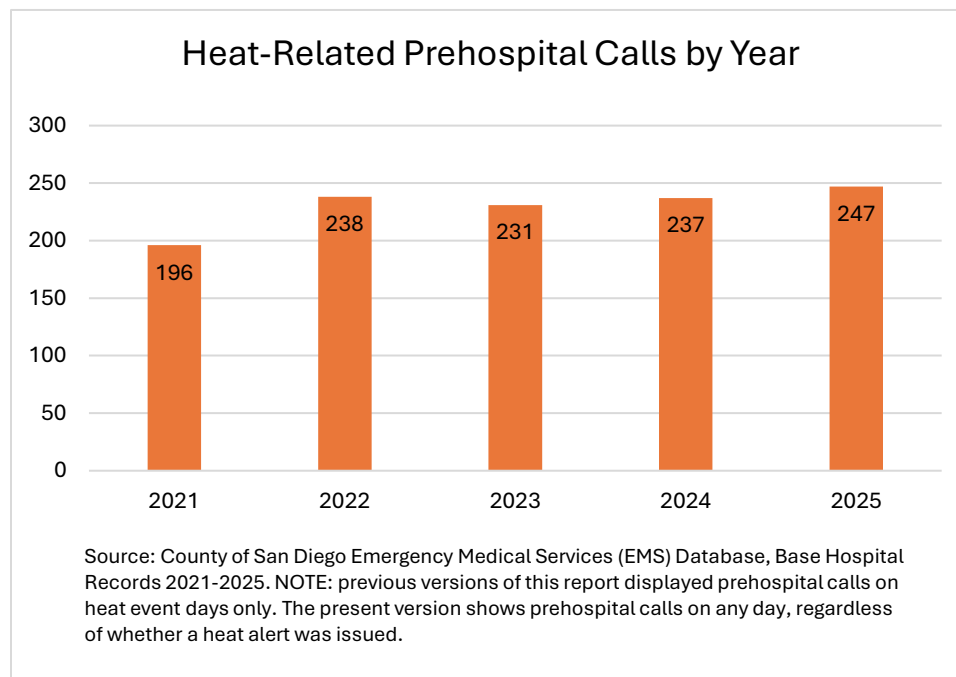
	2013	2014	2015	2016	2017*	2018	2019	2020	2021	2022	2023	2024	2025	Total
January	0	0	0	0	*	0	0	0	0	0	0	0	0	0
February	0	0	0	0	*	0	0	0	0	3	0	0	0	3
March	0	0	0	0	*	0	0	0	0	0	0	0	0	0
April	0	0	0	0	*	0	0	7	0	3	0	0	0	10
May	0	4	0	0	*	0	0	8	0	0	0	0	0	12
June	3	0	6	13	*	2	2	4	12	7	0	12	3	64

July	3	2	0	6	*	8	4	5	5	5	21	22	2	83
August	0	0	6	2	*	3	8	12	9	2	9	4	12	67
September	1	5	4	3	*	0	2	6	10	13	2	9	2	57
October	0	3	4	0	*	0	2	6	0	0	3	8	2	28
November	0	0	0	0	*	0	0	0	0	0	0	0	0	0
December	0	0	0	0	*	0	0	0	0	0	0	0	0	0
Total	7	14	20	24	*	13	18	48	36	33	35	55	21	324
*2017 Data not available. Source: County of San Diego Emergency Medical Services (EMS) Database 2013-2023, County of San Diego Public Health Preparedness and Response Database 2024-2025														

HEAT-RELATED PREHOSPITAL CALLS AND EMERGENCY DEPARTMENT VISITS

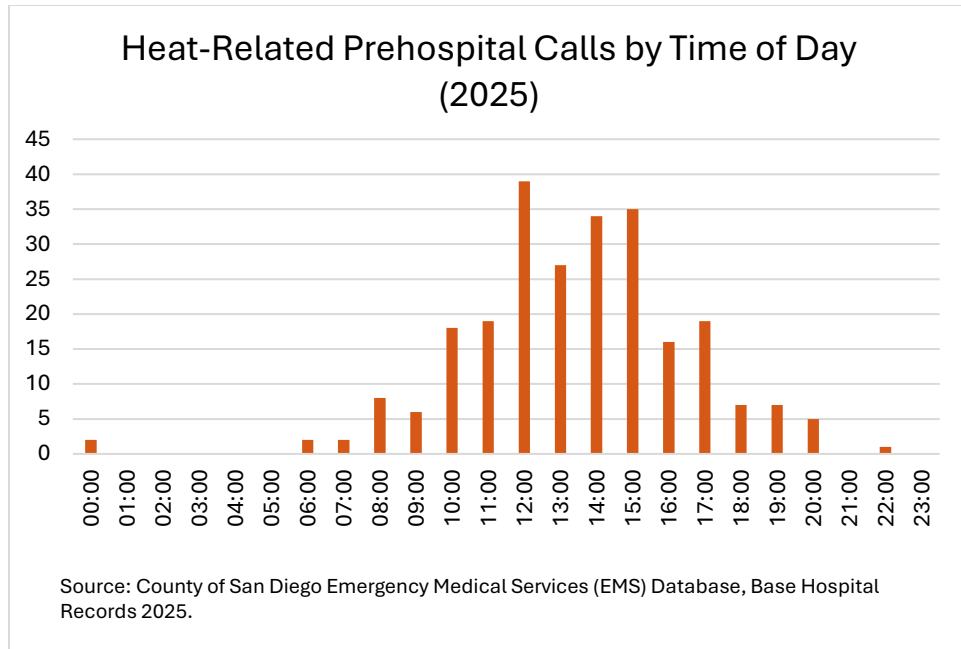
Despite the lower number of heat event days, there were 247 heat-related prehospital (EMS) calls in 2025, slightly more than any of the four previous years (Figure 3).

FIGURE 3: HEAT-RELATED PREHOSPITAL CALLS BY YEAR



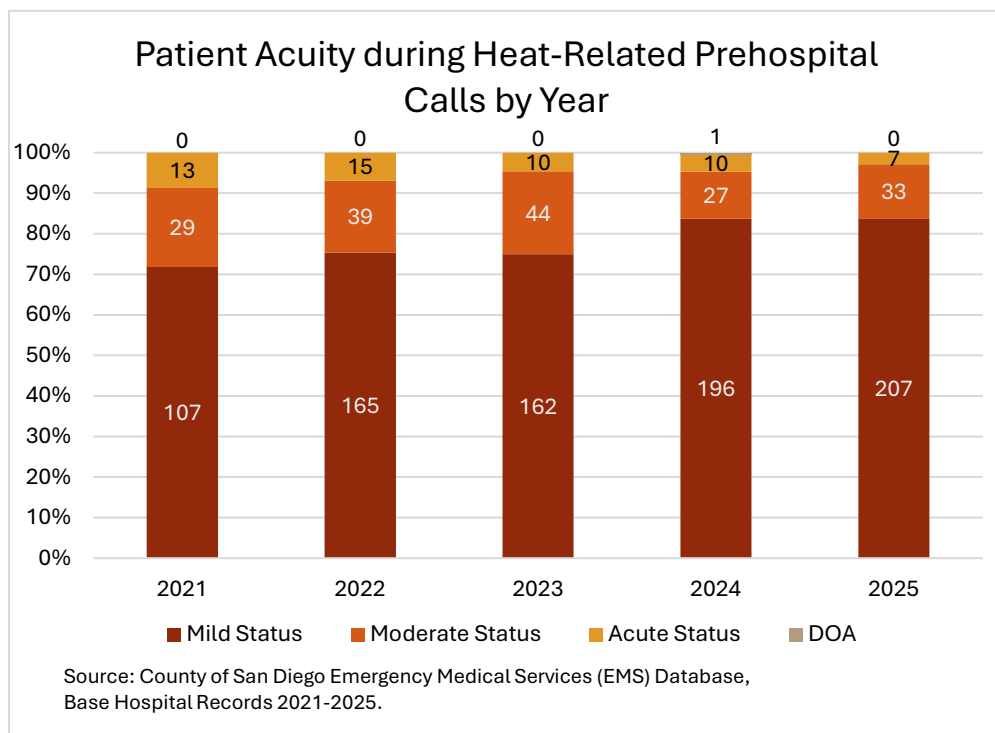
Heat-related calls were concentrated around the hours of 12:00 PM to 3:00 PM (Figure 4).

FIGURE 4: HEAT-RELATED PREHOSPITAL CALLS BY TIME OF DAY



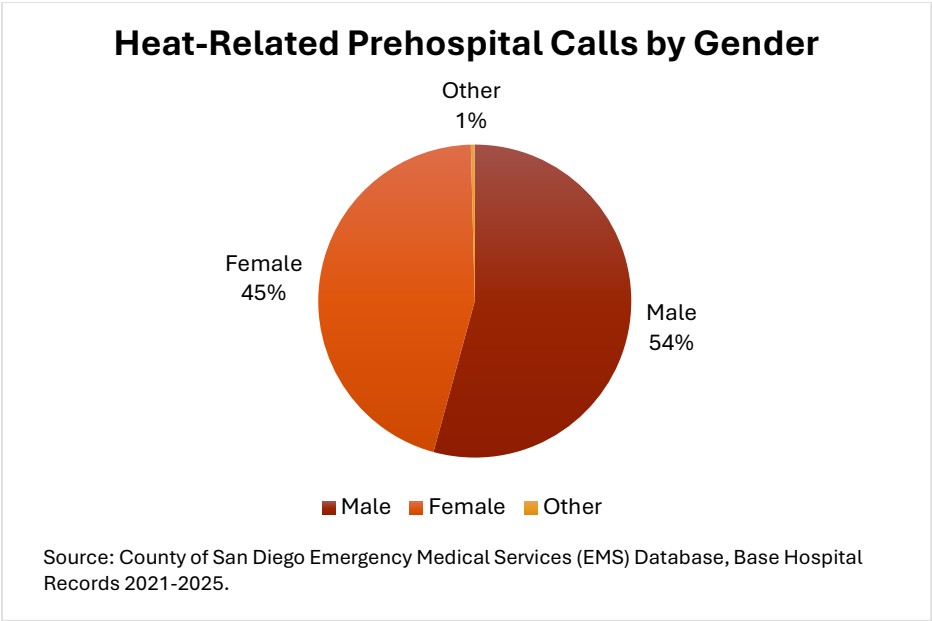
Of the 247 calls, 207 patients (83.8%) had a mild status, similar to the previous year, and an improvement from the three years before that (Figure 5).

FIGURE 5: PATIENT ACUITY FOR PREHOSPITAL CALLS BY YEAR



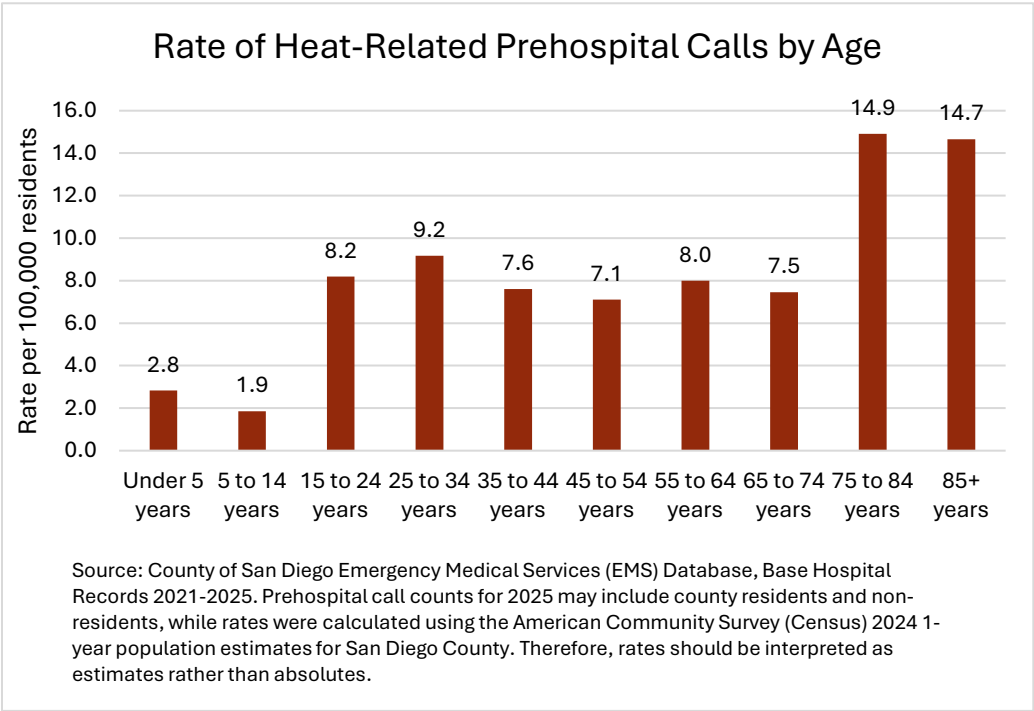
Slightly more than half (54%) of heat-related prehospital calls were for male patients (Figure 6).

FIGURE 6: PREHOSPITAL CALLS BY GENDER



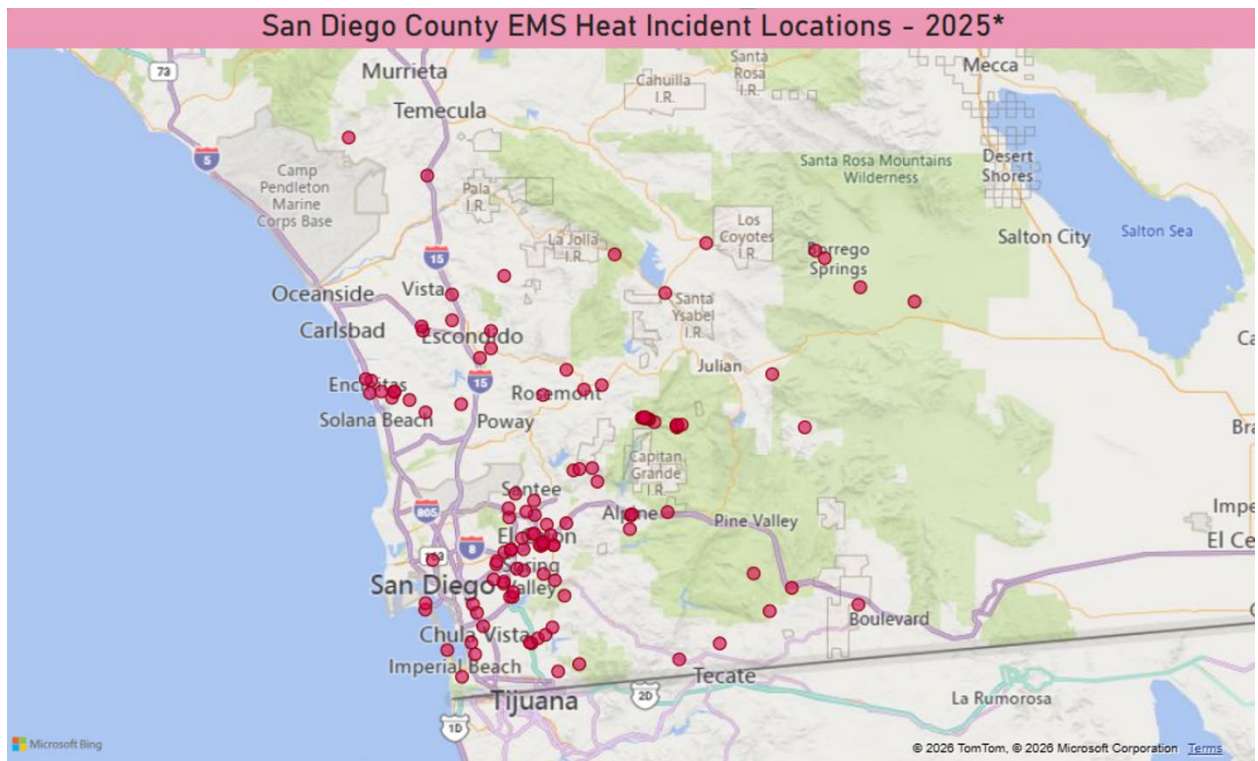
People aged 75 years and above were disproportionately affected by heat illness demonstrated by a rate of nearly 15 calls per 100,000 people (Figure 7); younger adult age groups averaged around 8 calls per 100,000 people, and youth around 2 calls per 100,000 people.

FIGURE 7: PREHOSPITAL CALLS BY AGE



Heat-related prehospital calls took place all over the county, concentrated in high-population areas. Note: the cities of San Diego, Carlsbad, and Oceanside are not included due to restrictive data use agreements.

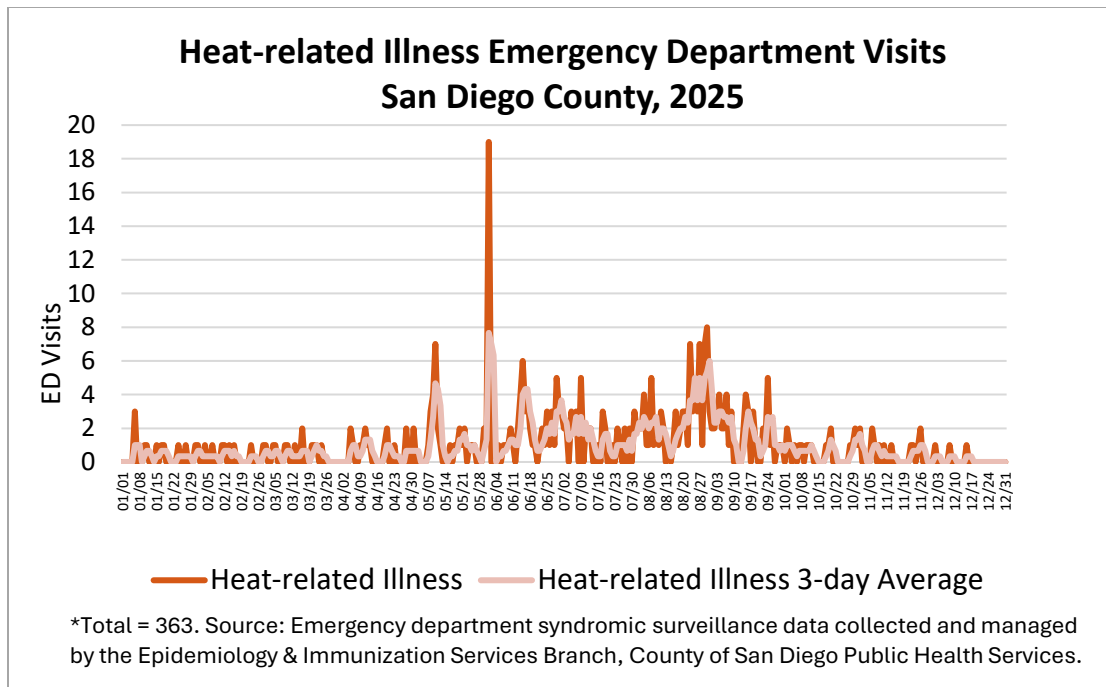
FIGURE 8: PREHOSPITAL CALLS MAP, 2025



*Source: County of San Diego, Emergency Medical Services, LEMSIS Elite Prehospital Care Record. Incidents are defined as having a paramedic provider impression of Hyperthermia/Heatstroke. Heat-affected patients may have other, generic provider impressions as this is not a definitive diagnosis. The cities of San Diego, Carlsbad, and Oceanside are not included due to restrictive data use agreements.

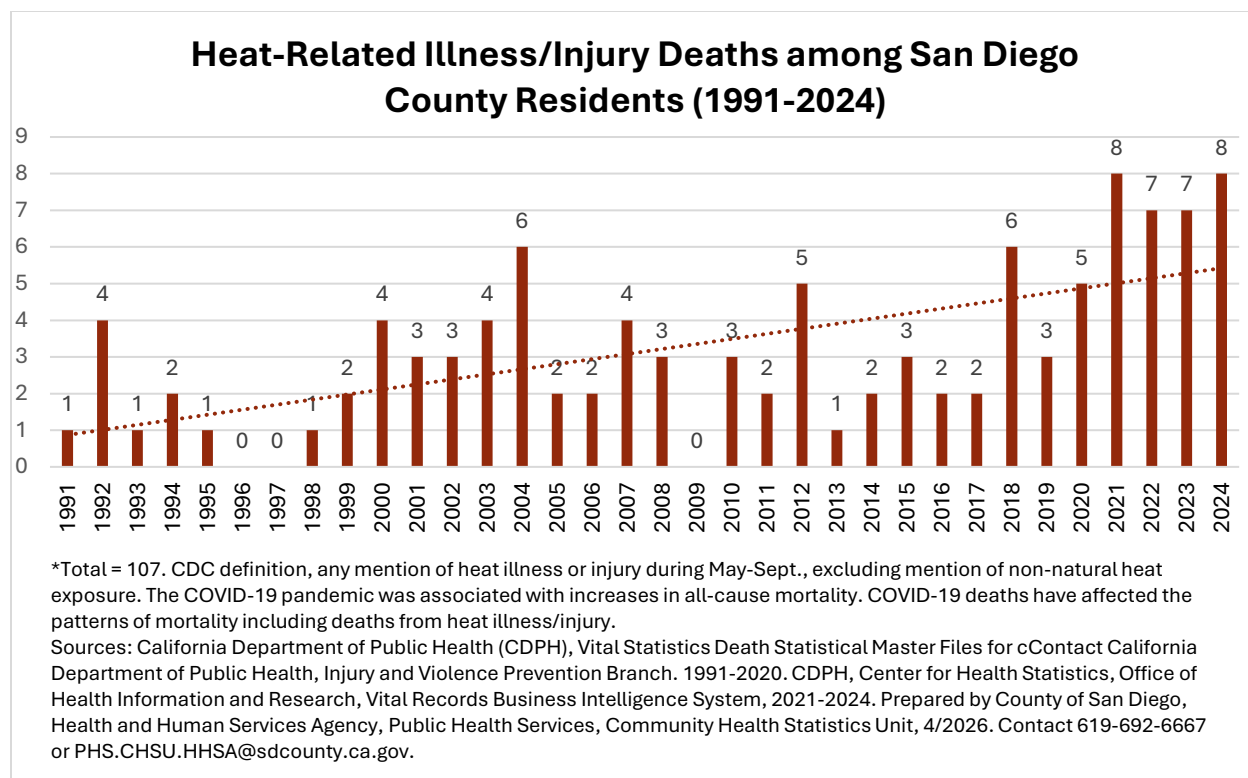
Heat-related illness emergency department visits also increased over the summer months in 2025, with notable increases in early June and late August (Figure 8).

FIGURE 9: HEAT-RELATED ILLNESS ED VISITS, 2025



Heat illness/injury deaths among San Diego County residents have been steadily rising over the last two decades (Figure 9), with eight deaths in 2024 (the most recently available data). For trends up through 2024 in heat-related illness emergency department discharges and hospitalizations among San Diego County residents, please see the appendix.

FIGURE 10: HEAT ILLNESS/INJURY DEATHS AMONG SAN DIEGO COUNTY RESIDENTS (1991-2024).



COOL ZONE PROGRAM

The Cool Zones program is a network of free, air-conditioned community sites across San Diego County who open their doors to anyone needing to escape the heat. Around 80 Cool Zones were opened during the 2025 heat season. Individuals can locate a Cool Zone near them using the [Cool Zones website](#) or the California Office of Environmental Health Hazard Assessment's [CalHeatScore Tool](#) (Cool Centers tab).

COUNTY COMMUNICATIONS OFFICE ACTIVITIES

The County Communications Office (CCO) recognizes the importance of communicating directly with the public about programs and services that add value to their health, safety, neighborhood, and environment. When excessive heat is expected, the County Communications Office works with Public Health Services and other County departments to determine public messaging and whether those messages will be delivered via social media, news release, or both.

FIGURES 11-13: SOCIAL MEDIA COMMUNICATIONS DURING HEAT EVENTS



FIGURES 14-15: COUNTY NEWS CENTER ARTICLES DURING HEAT EVENTS

HEALTH

High Heat This Week, Here are Tips to Stay Safe

Oct. 27, 2025 | 1:44 PM

Reading Time: 2 minutes

The national weather service has issued a heat advisory for the valleys in San Diego County Tuesday morning through Wednesday evening, and County officials are offering tips for how people, their families and pets can stay safe.

Credit: Shutterstock

HEALTH

Stay Cool in the Heatwave

Aug. 20, 2025 | 1:20 PM

Reading Time: 2 minutes

With extreme heat warnings issued for the inland valley and desert regions, it is important to avoid getting overheated. Extremely high temperatures can be dangerous to people and pets.

CONCLUSION

As extreme heat becomes more prevalent, The County of San Diego continues to monitor and respond to heat events that can affect the health of San Diego County residents.

To help keep yourself and your loved ones safe during a heat event:⁴

- Stay somewhere cool or get to one of the Cool Zones.
- Take a cold shower or bath.
- Stay hydrated and drink plenty of water.
- Avoid drinks that contain alcohol, caffeine, and lots of sugar.
- Wear light clothing and hats.
- Avoid being outdoors during hottest part of the day (10am-4pm).
- Avoid strenuous activity.
- Do not leave children in cars on hot days.
- Do not leave pets in cars.
- Check in on neighbors, family, or friends at increased risk, especially if they live alone.
- Ensure they have access to plenty of water, ice in their freezer, and a fan if possible.
- Offer to help them get to a cool zone or another cool location.

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County of San Diego, Health and Human Services Agency, Public Health Services. 2025 Annual Excessive Heat Report. October 27th, 2026.

This document was developed by the Public Health Preparedness and Response Branch with contributions from the Community Health Statistics Unit, the Epidemiology and Immunization Services Branch, and the Emergency Medical Services Office, and is in support of Live Well San Diego.

Inquiries regarding this document may be directed to:

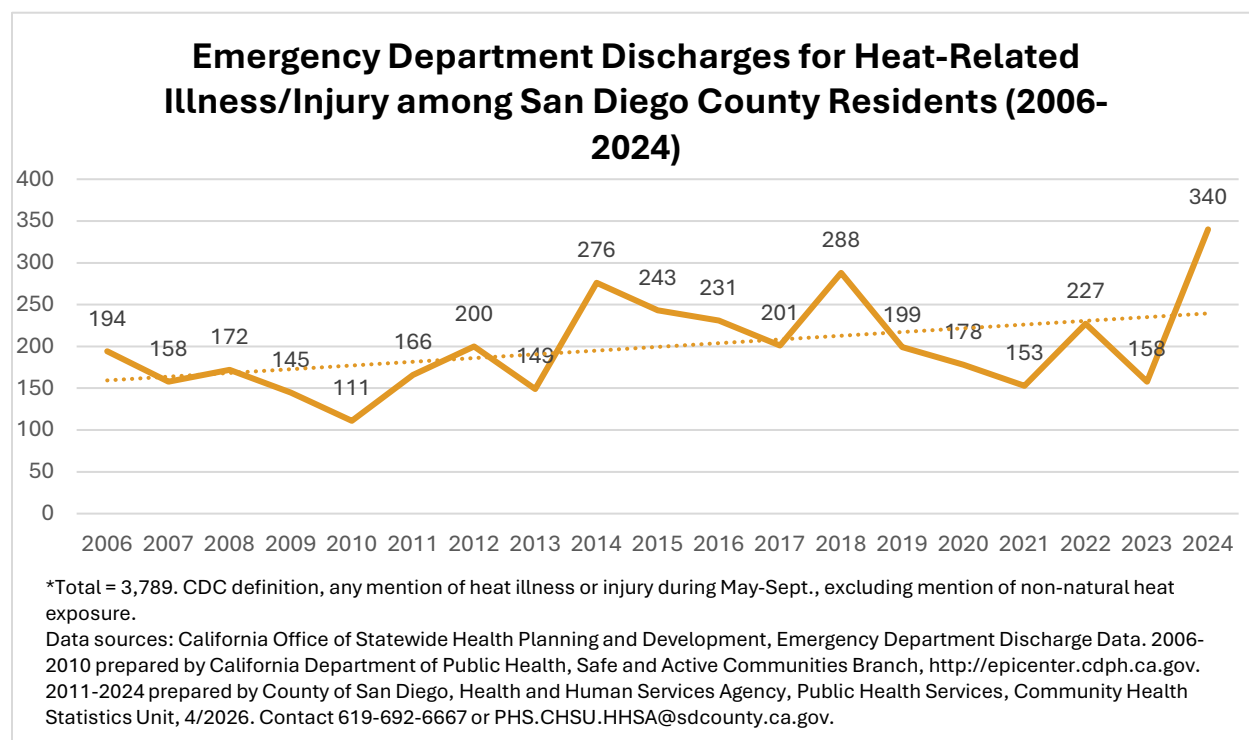
*Public Health Preparedness and Response
Public Health Services
Health and Human Services Agency
County of San Diego
MHOAC.HHSA@sdcounty.ca.gov*

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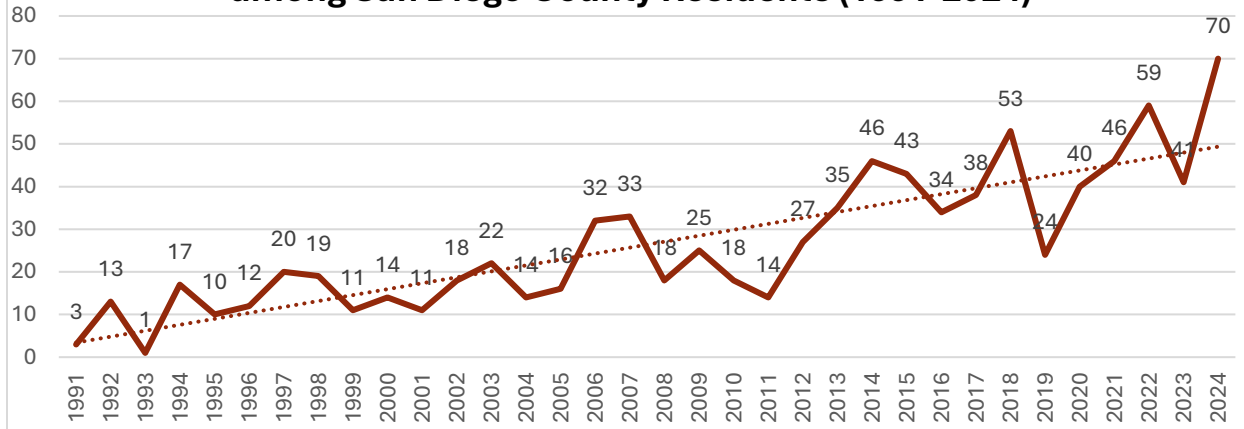
APPENDIX

APPENDIX A: EMERGENCY DEPARTMENT DISCHARGES FOR HEAT ILLNESS/INJURY AMONG SAN DIEGO COUNTY RESIDENTS (2006-2024).



APPENDIX B: HOSPITALIZATIONS FOR HEAT-RELATED ILLNESS/INJURY AMONG SAN DIEGO COUNTY RESIDENTS (1991-2024).

Hospitalizations for Heat-Related Illness/Injury among San Diego County Residents (1991-2024)



*Total = 897. CDC definition, any mention of heat illness or injury during May-Sept., excluding mention of non-natural heat exposure.

Data sources: California Office of Statewide Health Planning and Development, Patient Discharge Data. 1991-2010 prepared by California Department of Public Health, Safe and Active Communities Branch (<http://epicenter.cdph.ca.gov>). 2011-2024 prepared by County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 4/2026. Contact 619-692-6667 or PHS.CHSU.HHSA@sdcounty.ca.gov.