



2023 Heat Mortality Analysis and Mitigation Strategies for American Indians in Maricopa County

Ryan Martin, Native American Liaison
July 11, 2024





Introduction to Heat Mortality in Maricopa County



Overview of American Indian Heat Mortality in 2023

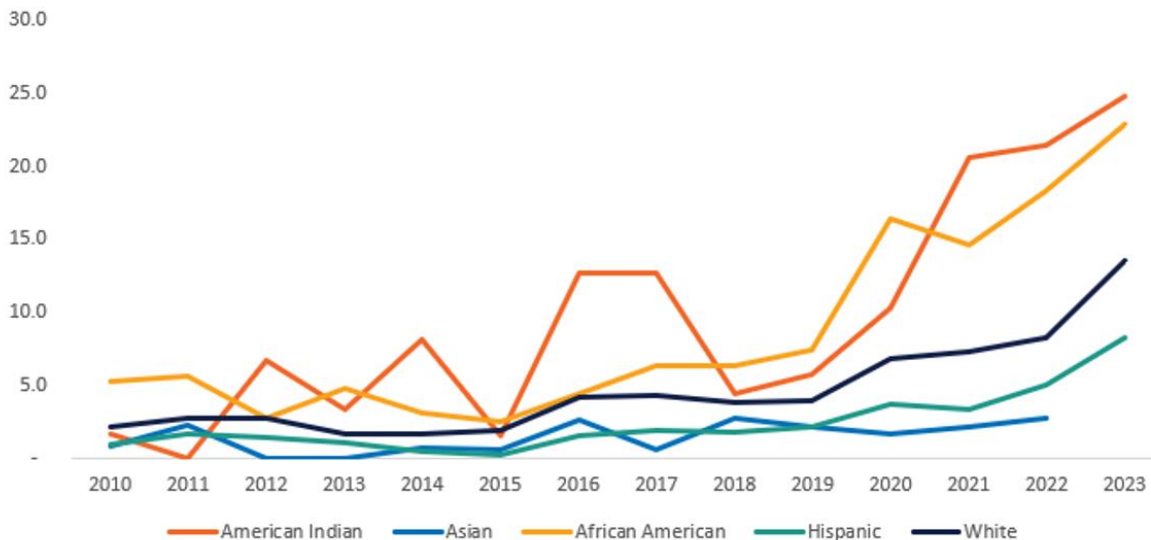
- 35 heat-related deaths among American Indians
- High prevalence of deaths among males (more than 4 out of 5)
- Significant age group affected: 35-64 years old (almost 2 out of 3 deaths)

Report can be found at:

<https://www.maricopa.gov/ArchiveCenter/ViewFile/Item/5796>

Increasing Heat Mortality Trends

Rate of Heat Related Deaths per 100,000 by population by Race/Ethnicity, Maricopa County 2010-2023

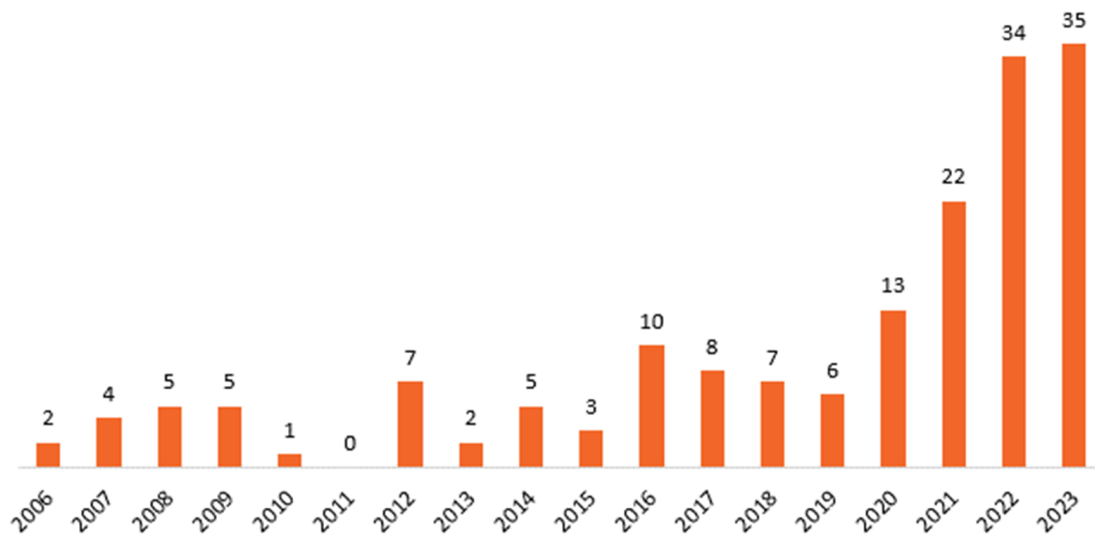


American Indian Heat Mortality Over the Years

- Per population depicts a consistent and leading trend from 2021 to 2023

Increasing Heat Mortality Trends

Number of Heat Related Deaths among American Indians, Maricopa County 2006-2023

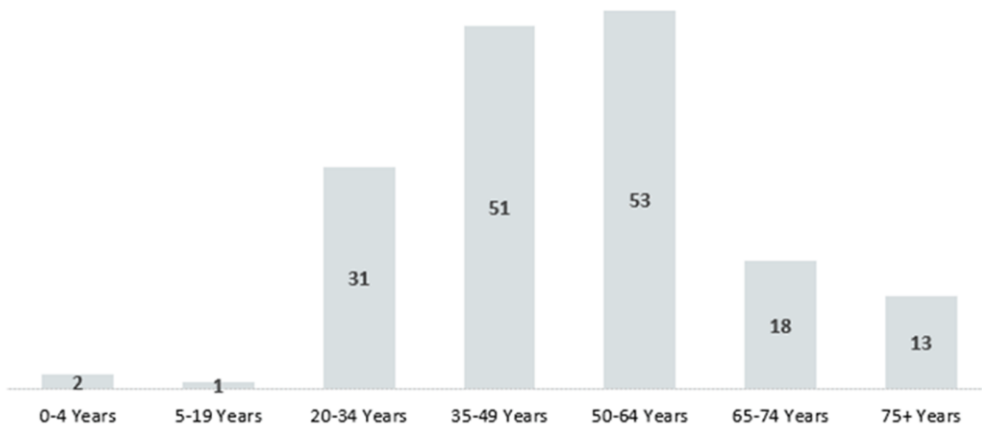


American Indian Heat Mortality Over the Years

- Historical data showing increasing trend: 2 in 2013 to 35 in 2023
- More than 71% of deaths on days with excessive heat warnings
- Rising concern over the increasing number of heat-related deaths

Gender and Age Factors in Heat Mortality

Number of American Indian Heat Related Deaths by Age, Maricopa County 2006-2023.



American Indian Demographic Analysis

- Majority affected were aged 35-64 years (combined gender)
- 80% of heat-related deaths were male
- Importance of focusing middle-aged men for heat safety education



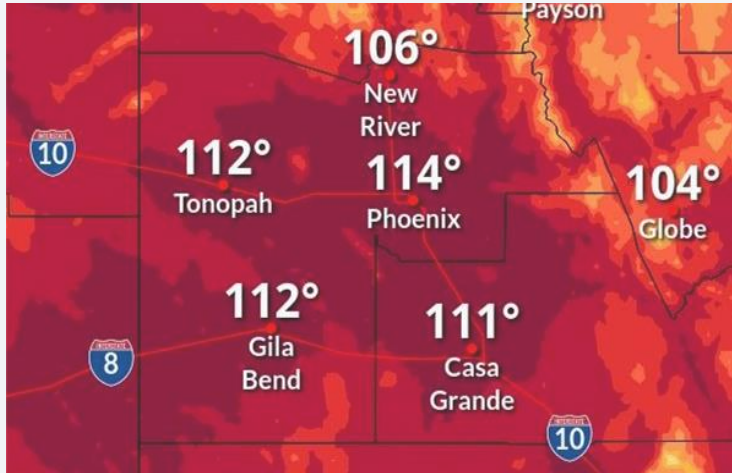
Health and Substance Use Correlations



Medical History and Substance Use

- 60% of American Indians had a history of physical/mental health conditions
- 91% of American Indian deaths involved substance use
- Importance of integrating substance abuse and mental health support in heat mitigation strategies

Geographic and Residency Status



Location and Residency Status

- 60% of American Indian deaths among non-Maricopa County residents
- 4 out of 5 deaths occurred outdoors
- 71% of deaths occurred on a day of Excessive Heat Warning by the Weather Service
- July 2023 was the deadliest month



Impact of Homelessness on Heat Mortality



Homelessness and Vulnerability

- 60% of heat-related deaths were among American Indian homeless individuals
- Challenges of addressing heat mortality for transient populations
- Critical need for focused interventions for the homeless population

Collaborative Heat Relief Initiatives

Comprehensive Heat Relief Network

- The Maricopa County Department of Public Health, Maricopa Association of Governments, the State of AZ, and various local agencies collaborate to provide heat relief
- Collaboration enhances resource distribution and accessibility for vulnerable populations
- Maricopa County Board of Supervisors approved funding for 2-1-1 support, bottled water, and heat relief supplies for heat relief sites
- Initiatives include cooling centers, respite centers, hydration stations that are strategically located throughout the county



Heat Project Development by Local Governments



Maricopa County's Strategic Planning

- Championed the creation of positions aimed at filling gaps in population representation
- Expanding and enhancing existing heat infrastructure
- Ongoing assessment and adaptation of policies to meet the needs of the community



Maricopa Association of Governments

- Key in coordinating regional efforts, cities in Maricopa County are equipped
- Continuous collaboration with public health officials to mitigate gaps


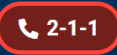


Community Engagement and Support


- Partnerships with local stakeholders to extend outreach and support
- Focus on culturally sensitive approaches for inclusivity and effectiveness




Available Resources

Get Help ▾Give Help ▾Partners ▾LearnContact UsEN ES


Select a topic below or [contact us](#) to learn more.




Find a Cooling/Hydration Center




Heat Relief Weatherization Programs & Home Rehabilitation Services



Heat Relief Utility Assistance



Heat Relief Arizona Tenant Rights & Repairs

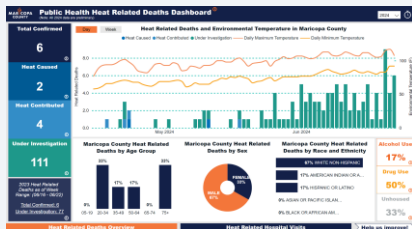
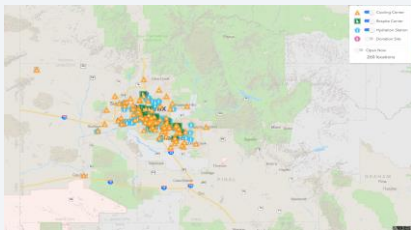


Recognize, prevent, and treat heat-related illnesses

2-1-1 Arizona

- Free transportation for heat relief within Maricopa County
- Information for home weatherization, utility assistance, recognize-prevent-treat heat-related illnesses

Available Resources



Heat Relief Toolkit

- Social Media
- Regional Community Information
- Media
- Reports

Heat Relief Network Map

- Locations for Cooling Centers, Respite Centers, Hydration Stations, and Donation Sites

2024 Heat-Related Illness and Death Dashboard

- Ethnic representation and interactive
- Comparative 2023 and 2024 data

Conclusion



Summary

- 2023 heat death significantly impacted the unsheltered and male population with sustained trends for the past 3-years
- Local infrastructure to support is healthy and engaged
- Engage in resources and share as much as possible

Contact us and follow

Ryan Martin, Native American Liaison, Maricopa County Dept. of Public Health



ryan.martin@maricopa.gov



(480) 673-7755

Maricopa County Dept. of Public Health



Email form on website



<https://www.maricopa.gov/5302/Public-Health>



(602) 506-6900



Social Media Handle: “MaricopaHealth”

Sources

- Batchelor, B., Rubio, M., Gettel, A., Ward, J. *2023 Heat Related Deaths Report*. (2024). Maricopa County Department of Public Health, Division of Epidemiology & Informatics. <https://www.maricopa.gov/ArchiveCenter/ViewFile/Item/5796>
- *Heat Relief Network*. (n.d.). Maricopa Association of Governments. <https://azmag.gov/Programs/Heat-Relief-Network>. (last accessed June 24, 2024)
- Heat Relief Information & Resources. (n.d.). 2-1-1 Arizona. <https://211arizona.org/crisis/heat-relief/>. (last accessed June 24, 2024)



Discussion & questions



Ahe'hee