Heat-Associated Deaths in Maricopa County, AZ
Preliminary Report for 2021

Photograph by Dan Sorensen:
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Maricopa County Public Health
WeArePublicHealth.org
Heat-Associated Deaths by Year

Graph 1. There were 339 heat-associated deaths reported in 2021, a 5% increase from 2020 and a 70% increase from 2019.

Data Sources: Maricopa County, Office of Vital Registration and Office of Medical Examiner; Arizona Department of Health Services, Office of Vital Registration

Graph 2. Fifty-seven percent of heat-associated deaths in 2021 have been classified as heat caused which is similar to the overall trend (61%) since 2006.*

*Heat caused refers to cases where environmental heat was directly involved in the sequence of conditions causing death, whereas heat-related refers to cases in which environmental heat contributed to the death.
Heat-Associated Deaths by Month

Graph 3. Eighty-two percent of all heat-associated deaths occurred in the months of June, July, and August.**

**One heat-caused death in November suffered heat injuries back in August. The other November heat-caused death likely suffered injuries a couple of weeks prior in October.**
Heat-Associated Deaths and Temperatures

- Six excessive heat warnings were issued for Maricopa County for a total of 20 days by the National Weather Service in 2021.
- The highest daily maximum temperature in 2021 was 118°F and occurred June 17th.

Graph 4. Twenty-eight percent of heat-associated deaths occurred on days for which an excessive heat warning had been issued.
Heat-Associated Deaths by Demographic

Graph 5. The majority of heat associated deaths occurred among males.

Graph 6. The highest proportion of heat associated deaths occurred among those 50-64 years old.
Heat-Associated Deaths by Place of Injury

Graph 7. Since 2018 a higher proportion (77%) of heat associated deaths occurred outdoors compared to years prior (60%).

The majority of indoor deaths occurred in those age 65 and older whereas the majority of outdoor deaths occurred in those under the age of 65.
Heat-Associated Deaths by Substance Use

Graph 8. Sixty percent of all cases involved substance use as a cause of death or a contributing factor.

Heat-Associated Deaths and Homelessness

Graph 9. The number of heat associated deaths among the homeless population decreased 24% from 2020 to 2021, but it almost doubled from 2019 (n=307).**

**32 cases where the living situation was unknown were excluded from the graph.