Maricopa County Public Health WeArePublicHealth.org

HEAT ASSOCIATED DEATHS & HOSPITAL VISITS oa County 2018 WEEKLY REPORT lealth icHealth.org Week 40 (09/30-10/06)



Maricopa County Department of Public Health (MCDPH) conducts weekly heat associated mortality surveillance. The enhanced heat surveillance season usually begins in May and ends in October. This heat season (2018), there have been a total of **66 confirmed heat associated deaths**. Cooling and hydration stations in Maricopa County are open to the public throughout the heat season. For more information on Heat, please visit http://heataz.org.

Graph 1. There has been 66 confirmed heat-associated deaths in Maricopa County as of 10/06/18

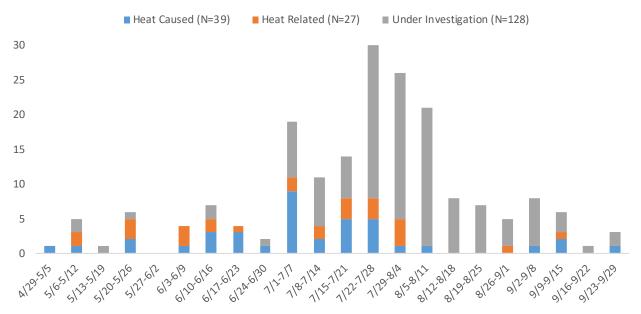
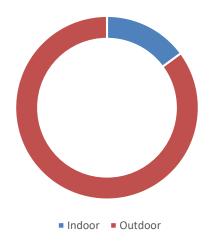


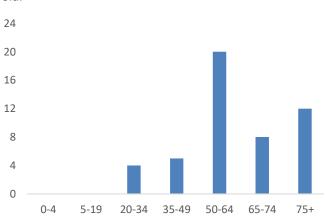
Table 1. Summary of 2018 and 2017 heat-associated cases during the same weeks.

	2018 Cases			2017 Cases		
	Confirmed	Under Investigation	First Confirmed	Confirmed	Under Investigation	First Confirmed
Season Cumulative Total	66	128	5/21/2018	47	134	4/10/2017

Graph 2. 85% of heat-associated deaths have had an injury place outdoors.



Graph 3. The highest proportion of heat-associated deaths are among those 50-64 years old.

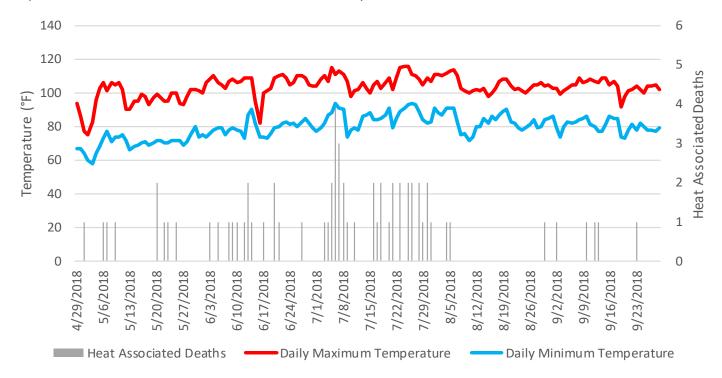


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Table 2. Air condition status among heat-associated indoor deaths, Maricopa County 2018

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Air Conditioning Status	Count	Percentage
Air Conditioning Present	8	80%
Non-Functioning	7	100%
No Electricity	0	0%
Blowing Hot Air	1	0%
Not in Use	0	0%
Unknown	0	0%
Air Conditioning Not Present	0	0%
Unknown	5	20%
Total Indoor Deaths	13	

Graph 4. The first heat associated death occured in May.



*Counts are preliminary and may increase as additional data are received.

Heat Caused (HC): Cases that mention heat or heat exposure in Part I of the death certificate causes of death (diseases or conditions in the direct sequence causing death), for variables cod_a, cod_b, cod_c, or cod_d. County of death: Maricopa.

Heat Related (HR): Cases that mention heat exposure in Part II of the death certificate causes of death (diseases and conditions contributing but not directly resulting in the death sequence), but not in any of the Part I variables (cod_a, cod_b, cod_c, or cod_d). County of death: Maricopa.

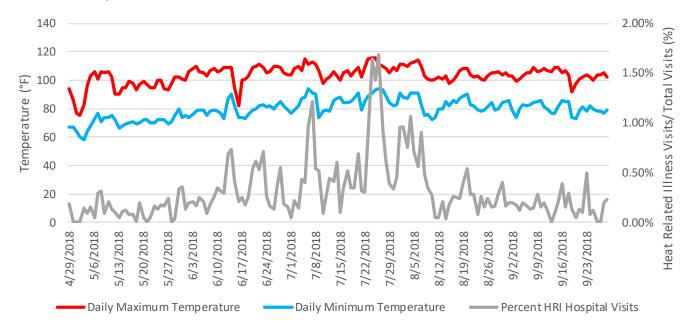
Under Investigation (UI): Cases the Maricopa County Office of Medical Examiner suspects are heat associated deaths.

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

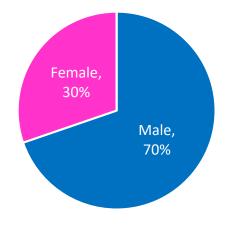
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Every year, hundreds of individuals visit Maricopa County hospitals due to environmental heat exposure and heat-related illness. Maricopa County Department of Public Health conducts weekly syndromic surveillance to identify these visits. Patient visit data from 13 Maricopa County emergency department and inpatient hospitals are available in near real-time and monitored to identify patients who may have experienced heat exhaustion or heat stroke. The National Syndromic Surveillance Program's BioSense Platform ESSENCE tool locates heat-related illness visits by identifying key terms and codes within the chief complaint field (i.e., the patient's stated reason for visit), admission reason field (i.e., the provider's noted reason for admission), and discharge diagnosis code field (i.e., ICD-9-CM and ICD-10-CM codes). Heat-related illness visits are displayed as a percentage of total hospital visits by day and monitored for trends.

Graph 5. The percentage of emergency and inpatient hospital visits due to environmental heat was not above expected in Week 36.



Graph 6. More males than females have visted the emergency department due to environmental heat among the identified cases.



Graph 7. Most of the idenfied emergency department visits due to environmental heat have been among those 18-44 years of age.

