

# Heat-Associated Deaths in Maricopa County, AZ Addendum Report for 2014



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Maricopa County Department of Public Health  
<http://www.maricopa.gov/publichealth/>

**MARICOPA COUNTY DEPARTMENT OF PUBLIC HEALTH  
DIVISION OF DISEASE CONTROL  
OFFICE OF EPIDEMIOLOGY**

**HEAT-ASSOCIATED DEATHS IN  
MARICOPA COUNTY, AZ  
ADDENDUM TO THE 2014 FINAL REPORT  
WITH RESOLUTION TO THREE PENDING  
CASES**

10/23/15

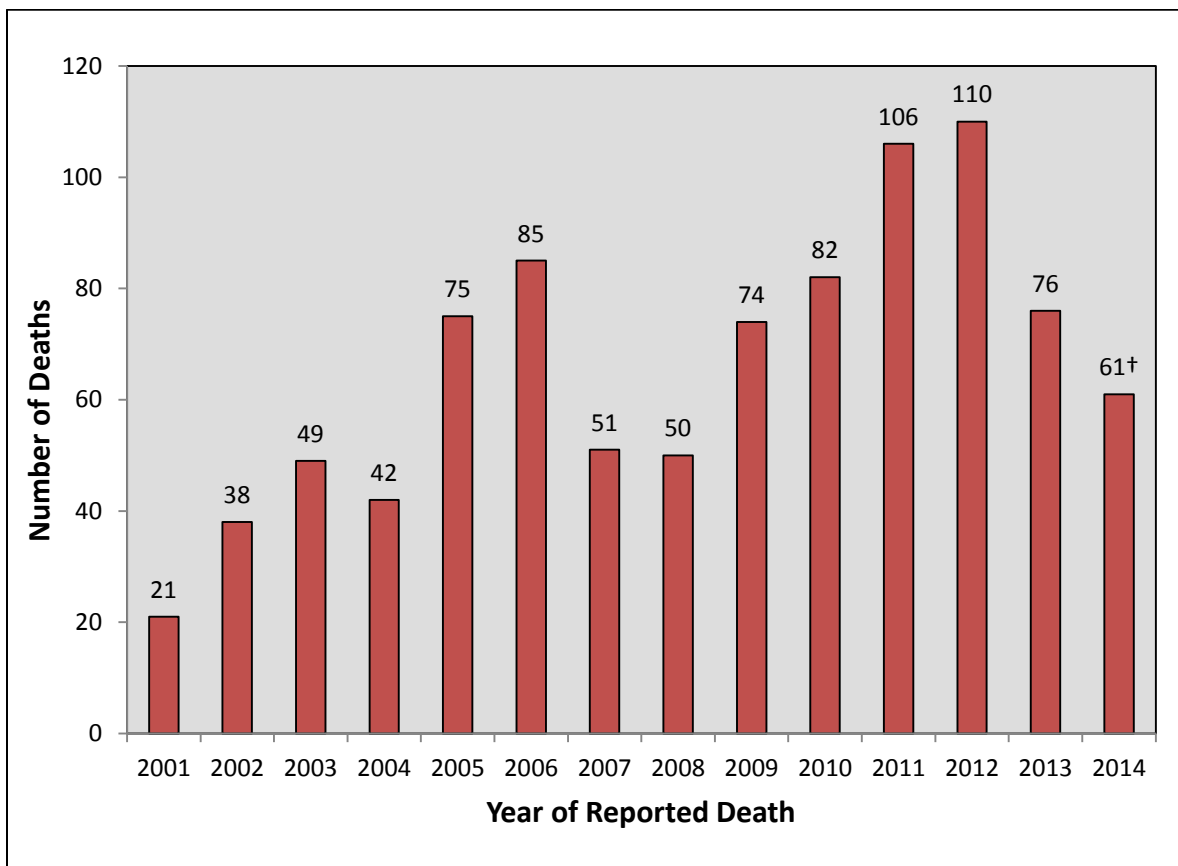
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## Background

After extensive investigation into the three pending cases, it was found that two of the three cases were legitimate heat-associated deaths, while one case was ruled out. This addendum is a continuation of the 2014 Final Heat-Associated Death Report and includes a summarization of the two heat-associated deaths that have been confirmed. In this report you will find a table depicting the history and demographics of the two previously pending heat-associated deaths, followed by a series of tables depicting the preliminary 2014 results compared to the final 2014 results.

**Graph 1. Confirmed Heat-Associated Deaths by Year, Maricopa County, 2001-2014**



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

\* These numbers are for heat-associated deaths reported to MCDPH as of 10/05/2015.

† One case had heat injury outside of Maricopa County, and therefore is not included in analysis

## Final Results of the Two Pending Cases

**Table 1**

<b>Identifying Characteristics of the Two Pending Cases</b>		
	<u>Case #1</u>	<u>Case #2</u>
<b>Heat Caused or Heat Related</b>	Heat Caused	Heat Caused
<b>Gender</b>	Male	Male
<b>Age</b>	3	55
<b>Age Group</b>	0-4	50-64
<b># of Years Spent in Arizona</b>	Unknown	Unknown
<b>Race</b>	African American	African American
<b>Place of Injury</b>	Outdoor	Indoor
<b>Place of Outdoor Injury</b>	Car	N/A
<b>Air Conditioning Status</b>	N/A	No Air Conditioning
<b>Homeless Status</b>	Non-Homeless	Non-Homeless
<b>Drug/Alcohol Related based on records from the Death Certificate</b>	No	No
<b>Place of Residency</b>	Maricopa County	Maricopa County
<b>Date of Injury</b>	10/04/2014	7/11/2014
<b>Date of Death</b>	10/05/2014	7/11/2014

## Comparison of the Preliminary and Final Results for the 2014 Heat Mortality Report

**Table 2**

<b>Heat Associated Deaths by Classification</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>Heat Related</b>	28 (48.3%)	28 (46.7%)
<b>Heat Caused</b>	30 (51.7%)	32 (53.3%)
<b>Total</b>	<b>58 (100%)</b>	<b>60 (100%)</b>

**Table 3**

<b>Heat Associated Deaths by Place of Residence</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>Maricopa County</b>	50 (86.2%)	52 (86.6%)
<b>Non-Maricopa County</b>	4 (6.9%)	4 (6.7%)
<b>Non-Arizona</b>	4 (6.9%)	4 (6.7%)
<b>Total</b>	<b>58 (100%)</b>	<b>60 (100%)</b>

\*Non-Maricopa County residents include 4 cases from unidentified AZ counties

\*\*Non-Arizona residents include three U.S. residents (CA, ID and WA) and one non-US resident (Brazil)

**Table 4**

<b>Heat Associated Deaths by Gender</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>Total # Males</b>	47 (81.0%)	49 (81.7%)
<b>Total # Females</b>	11 (19.0%)	11 (18.3%)
<b>Total</b>	<b>58 (100%)</b>	<b>60 (100%)</b>

**Table 5**

<b>Heat Associated Deaths by Age Group</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>0-4</b>	0 (0.0%)	1 (1.7%)
<b>5-19</b>	0 (0.0%)	0 (0.0%)
<b>20-34</b>	6 (10.4%)	6 (10.0%)
<b>35-49</b>	9 (15.5%)	9 (15.0%)
<b>50-64</b>	18 (31.0%)	19 (31.7%)
<b>65-74</b>	13 (22.4%)	13 (21.6%)
<b>75+</b>	12 (20.7%)	12 (20.0%)
<b>Total</b>	<b>58 (100%)</b>	<b>60 (100%)</b>

**Table 6**

<b>Heat Associated Deaths by Number of Years Spent in Arizona</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>&lt; 3</b>	6 (10.3%)	6 (10.3%)
<b>3-9</b>	6 (10.3%)	6 (10.3%)
<b>10-19</b>	9 (15.6%)	9 (15.6%)
<b>20+</b>	37 (63.8%)	37 (63.8%)
<b>Total</b>	<b>58 (100%)</b>	<b>58 (100%)</b>

\*Excludes two cases for which time spent in Arizona was unknown at the time of analysis

**Table 7**

<b>Heat Associated Deaths by Race/Ethnicity</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>White</b>	39 (67.3%)	39 (65%)
<b>Hispanic</b>	7 (12.1%)	7 (11.7%)
<b>African American</b>	5 (8.6%)	7 (11.7%)
<b>Native American</b>	5 (8.6%)	5 (8.2%)
<b>Asian/Pacific Islander</b>	1 (1.7%)	1 (1.7%)
<b>Other</b>	1 (1.7%)	1 (1.7%)
<b>Total:</b>	<b>58 (100%)</b>	<b>60 (100%)</b>

**Table 8**

<b>Heat Associated Deaths by Place of Injury</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>Indoor</b>	16 (27.6%)	17 (28.3 %)
<b>Outdoor</b>	42 (72.4%)	43 (71.7%)
<b>Total</b>	<b>58 (100%)</b>	<b>60 (100%)</b>



**Table 9**

<b>Heat Associated Deaths by Place of Outdoor Injury</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>Urban Area</b>	15 (35.7%)	15 (34.9%)
<b>Desert Area/Trail</b>	8 (19.0%)	8 (18.6%)
<b>Private Residence</b>	12 (28.6%)	12 (27.9%)
<b>Car</b>	5 (11.9%)	6 (14.0%)
<b>Shed</b>	2 (4.8%)	2 (4.6%)
<b>Total</b>	<b>42 (100%)</b>	<b>43 (100%)</b>

**Table 10**

<b>Heat Associated Deaths by Residency Status</b>		
	<u>Preliminary Results</u>	<u>Final Results</u>
<b>Homeless</b>	7 (12.1%)	7 (11.7%)
<b>Non-Homeless</b>	51 (87.9%)	53 (88.3%)
<b>Total</b>	<b>58 (100%)</b>	<b>60 (100%)</b>

**Table 11**

<b>Drug and Alcohol Use, as Mentioned on the Death Certificate, for Heat-Associated Deaths</b>				
	<b><u>Preliminary Results</u> Drug and/or Alcohol Use</b>	<b><u>Preliminary Results</u> 'No' Drug and/or Alcohol Use</b>	<b><u>Final Results</u> Drug and/or Alcohol Use</b>	<b><u>Final Results</u> 'No' Drug and/or Alcohol Use</b>
<b>Total</b>	<b>22 (38%)</b>	<b>36 (62%)</b>	<b>22 (36.7%)</b>	<b>38 (63.3%)</b>