



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

**HEAT-ASSOCIATED DEATHS IN
MARICOPA COUNTY, AZ
ADDENDUM TO THE 2012 FINAL REPORT
WITH RESOLUTION TO TWO PENDING CASES**

10/3/2014

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Background

This addendum is a continuation of the 2012 Final Heat-Associated Death Report and includes a summarization of the two heat-associated deaths that were previously pending. After extensive investigation into the two pending cases, it was found that both cases were legitimate heat-associated deaths. 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 2012 results compared to the final 2012 results

Final Results of the Two Pending Cases

Table 1

Identifying Characteristics of the Two Pending Cases		
	<u>Case #1</u>	<u>Case #2</u>
Heat Caused or Heat Related	Heat Caused	Heat Caused
Gender	Female	Female
Age	68	54
Age Group	65-74	50-64
# of Years Spent in Arizona	65	16
Race	White	African American
Place of Injury	Outdoor	Outdoor
Place of Outdoor Injury	Urban Area	Car
Air Conditioning Status	N/A	N/A
Homeless Status	Non-Homeless	Non-Homeless
Drug/Alcohol Related based on records from the Death Certificate	No	No
Place of Residency	Out of Jurisdiction (Pinal County)	Maricopa County
Date of Injury	8/30/2012	10/20/2012
Date of Death	10/23/2012	10/20/2012

Comparison of the Preliminary and Final Results for the 2012 Heat Mortality Report

Table 2

Heat Associated Deaths by Classification		
	<u>Preliminary Results</u>	<u>Final Results</u>
Heat Related	47 (43.5%)	47 (42.7%)
Heat Caused	61 (56.5%)	63 (57.3%)
Total	108 (100%)	110 (100%)

Table 3

Heat Associated Deaths by Place of Residence		
	<u>Preliminary Results</u>	<u>Final Results</u>
Maricopa County	86 (82.7%)	87 (82.1%)
Non-Maricopa County	11 (10.6%)	12 (11.3%)
Non-Arizona	7 (6.7%)	7 (6.6%)
Total	104 (100%)	106 (100%)

*Excludes 4 cases where residency could not be established

**Non-Maricopa County residents include Apache (1), Cochise (1) La Paz (1), Mohave (1), Pinal (2), and other unidentified AZ counties (6).

***Non-Arizona residents include seven U.S. residents (AR, CA (3), IA, MN) and one non-US resident (Mexico)

Table 4

Heat Associated Crude Deaths by Gender		
	<u>Preliminary Results</u>	<u>Final Results</u>
Total # Males	71 (65.7%)	71 (64.5%)
Total # Females	37 (34.3%)	39 (35.5%)
Total	108 (100%)	110 (100%)

Table 5

Heat Associated Deaths by Age Group		
	<u>Preliminary Results</u>	<u>Final Results</u>
0-4	2 (1.9%)	2 (1.8%)
5-19	1 (0.9%)	1 (0.9%)
20-34	4 (3.7%)	4 (3.6%)
35-49	21 (19.4%)	21 (19.1%)
50-64	36 (33.3%)	37 (33.6%)
65-74	15 (13.9%)	16 (14.6%)
75+	29 (26.9%)	29 (26.4%)
Total	108 (100%)	110 (100%)

Table 6

Heat Associated Deaths by Number of Years Spent in Arizona		
	<u>Preliminary Results</u>	<u>Final Results</u>
< 3	8 (8.5%)	8 (8.3%)
3-9	9 (9.6%)	9 (9.4%)
10-19	17 (18.1%)	18 (18.8%)
20+	60 (63.8%)	61 (63.5%)
Total	94 (100%)	96 (100%)

*Excludes fourteen cases for which time spent in Arizona was unknown at time of analysis

Table 7

Heat Associated Deaths by Race/Ethnicity		
	<u>Preliminary Results</u>	<u>Final Results</u>
White	59 (2.6)	59 (2.6)
Hispanic	16 (1.4)	16 (2.2)
African American	3 (1.6)	4 (1.6)
Asian/Pacific Islander	3 (2.0)	3 (2.0)
Native American	4 (6.4)	4 (6.4)
Total Rates:	85 (2.2)	86 (2.3)

*Preliminary results exclude twenty-three cases that were not Maricopa County

**Final results exclude twenty-four cases that were not Maricopa County

Table 8

Heat Associated Deaths by Place of Injury		
	<u>Preliminary Results</u>	<u>Final Results</u>
Indoor	45 (41.7%)	45 (41.0%)
Outdoor	62 (57.4%)	64 (58.2%)
Unknown	1 (0.9%)	1 (0.9%)
Total	108 (100%)	110 (100%)

Table 9

Heat Associated Deaths by Place of Outdoor Injury		
	<u>Preliminary Results</u>	<u>Final Results</u>
Urban Area	22 (35.5%)	23 (35.9%)
Desert Area/Trail	10 (16.1%)	10 (15.6%)
Private Residence	17 (27.4%)	17 (26.6%)
Car	13 (21%)	14 (21.9%)
Total	62 (100%)	64 (100%)

Table 10

Heat Associated Deaths by Residency Status		
	<u>Preliminary Results</u>	<u>Final Results</u>
Homeless	9 (8.3%)	9 (8.2%)
Non-Homeless	99 (91.7%)	101 (91.8%)
Total	108 (100%)	110 (100%)

Table 11

Drug and Alcohol Use, as Mentioned on the Death Certificate, for Heat-Associated Deaths by Homelessness				
	<u>Preliminary Results</u> Drug and/or Alcohol Use	<u>Preliminary Results</u> 'No' Drug and/or Alcohol Use	<u>Final Results</u> Drug and/or Alcohol Use	<u>Final Results</u> 'No' Drug and/or Alcohol Use
Homeless	4 (12.5%)	5 (6.6%)	4 (12.5%)	5 (6.4%)
Non-Homeless	28 (87.5%)	71 (93.4%)	28 (87.5%)	73 (93.6%)
Total	32 (100%)	76 (100%)	32 (100%)	78 (100%)

Table 12

Drug and Alcohol Use, as Mentioned by the Medical Examiner, for Heat-Associated Deaths by Homelessness				
	<u>Preliminary Results</u> Drug and/or Alcohol Use	<u>Preliminary Results</u> 'No' Drug and/or Alcohol Use	<u>Final Results</u> Drug and/or Alcohol Use	<u>Final Results</u> 'No' Drug and/or Alcohol Use
Homeless	4 (10%)	5 (7.4%)	4 (10%)	5 (7.1%)
Non-Homeless	36 (90%)	63 (92.6%)	36 (90%)	65 (92.9%)
Total	40 (100%)	68 (100%)	40 (100%)	70 (100%)