## **CARES Summary Report**

## Demographic and Survival Characteristics of OHCA

End of the Event: Dead in Field, Pronounced Dead in ED, Ongoing Resuscitation in ED | Arrest Witness Status: All | Resuscitation Attempted by 911 Responder: Yes | Presumed Cardiac Arrest Etiology: Presumed Cardiac Etiology | Service Date: From 10/1/2005 Through 12/31/2017

	Michigan	National
Data	N=20335	N=304922
Age	N=20310	N=304653
Mean	65.5	64.6
Median	67.0	66.0
Gender (%)	N=20332	N=304888
Female Male	7897 (38.8)	115995 (38.0)
	12435 (61.2)	188893 (62.0)
Race (%) American-Indian/Alaskan	N=20283 63 (0.3)	N=304703 1305 (0.4)
Asian	117 (0.6)	5671 (1.9)
Black/African-American	4780 (23.6)	68741 (22.6)
Hispanic/Latino	198 (1.0)	17294 (5.7)
Native Hawaiian/Pacific Islander	14 (0.1)	1553 (0.5)
White	10467 (51.6)	137232 (45.0)
Unknown	4644 (22.9)	72907 (23.9)
Location of Arrest (%) Home/Residence	N=20335	N=304419
Nursing Home	14078 (69.2) 3201 (15.7)	208682 (68.6) 35931(11.8)
Public Setting	3056 (15.0)	59806 (19.6)
Arrest witnessed (%)	N=20335	N=304911
Bystander Witnessed	7487 (36.8)	116433 (38.2)
Witnessed by 911 Responder	2029 (10.0)	32591 (10.7)
Unwitnessed	10819 (53.2)	155885 (51.1)
Who Initiated CPR? (%)	N=20334	N=304898
Not Applicable	17 (0.1)	316 (0.1)
Bystander	8033 (39.5)	122018 (40.0)
First Responder	5039 (24.8)	87624 (28.7)
Emergency Medical Services (EMS)	7245 (35.6)	94940 (31.1)
Was an AED applied prior to EMS arrival? (%)	N=20335	N=304084
Yes No	6655 (32.7)	86252 (28.4)
	13680 (67.3)	217832 (71.6)
Who first applied automated external defibrillator? (%)  Bystander	N=6649 1538 (23.1)	N=86219 16360 (19.0)
First Responder	5111 (76.9)	69823 (81.0)
Who first defibrillated the patient?* (%)	N=19182	N=258527
Not Applicable	12618 (65.8)	166941 (64.6)
Bystander	381 (2.0)	4697 (1.8)
First Responder	1321 (6.9)	17774 (6.9)
Responding EMS Personnel	4862 (25.3)	69110 (26.7)
First Arrest Rhythm (%)	N=20334	N=304897
Vfib/Vtach/Unknown Shockable Rhythm	4203 (20.7)	68418 (22.4)
Asystole	9312 (45.8)	143702 (47.1)
Idioventricular/PEA Unknown Unshockable Rhythm	3565 (17.5)	61703 (20.2)
•	3254 (16.0)	31074 (10.2)
Sustained ROSC (%) Yes	N=20326 5502 (27.1)	N=304328
No	14824 (72.9)	93336 (30.7) 210992 (69.3)
		N=281121
Yes Yes	N=19602 92 (0.5)	27745 (9.9)
No	19510 (99.5)	253376 (90.1)
Pre-hospital Outcome (%)	N=20335	N=304922
Pronounced in the Field	6331 (31.1)	92909 (30.5)
Pronounced in ED	2792 (13.7)	52169 (17.1)
Ongoing Resuscitation in ED	11212 (55.1)	159844 (52.4)
Overall Survival (%)	N=20335	N=304922
Overall Survival to Hospital Admission	4963 (24.4)	81103 (26.6)
Overall Survival to Hospital Discharge	1701 (8.4)	30920 (10.1)
With Good or Moderate Cerebral Performance	1368 (6.7)	24486 (8.0)
Missing hospital outcome	18	1100
Utstein¹ Survival (%)	N=2353	N=40862
	27.7%	32.9%
Utstein Bystander <sup>2</sup> Survival (%)	N=1316	N=23737
	30.7%	37.1%

Inclusion criteria: An out-of-hospital cardiac arrest where resuscitation is attempted by a 911 responder (CPR and/or defibrillation). This would also include patients that received an AED shock by a bystander prior to the arrival of 911 responders.

<sup>\*</sup>This is a new question that was introduced on the 2011 form.

Witnessed by bystander and found in a shockable rhythm

<sup>&</sup>lt;sup>2</sup>Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR by bystander and/or AED applied by bystander)