

CARES Summary Report

Demographic and Survival Characteristics of OHCA

Non-Traumatic Etiology | Arrest Witness Status: All | Date of Arrest: 01/01/24-12/31/24

Data	Kalamazoo County 2024 N=225	Kalamazoo County 2023 (N=249)	Michigan 2023 N=8671	National 2023 N=139822
Age	N=225	N=249	N=8670	N=139807
Mean	62.3	61.4	63.3	62.1
Median	66.0	64.0	66.0	65.0
Sex (%)	N=225	N=249	N=8671	N=139822
Female	79 (35.1)	94 (37.8)	3294 (38.0)	51700 (37.0)
Male	146 (64.9)	155 (62.2)	5375 (62.0)	88079 (63.0)
Race (%)	N=225	N=249	N=8671	N=139820
American-Indian/Alaskan	1 (0.4)	0 (0.0)	12 (0.1)	546 (0.4)
Asian	2 (0.9)	0 (0.0)	76 (0.9)	3880 (2.8)
Black/African-American	41 (18.2)	59 (23.7)	2251 (26.0)	30286 (21.7)
Hispanic/Latino	4 (1.8)	7 (2.8)	138 (1.6)	12177 (8.7)
Native Hawaiian/Pacific Islander	0 (0.0)	0 (0.0)	5 (0.1)	653 (0.5)
White	172 (76.4)	169 (67.9)	5275 (60.8)	70459 (50.4)
Multi-racial	3 (1.3)	1 (0.4)	61 (0.7)	619 (0.4)
Unknown	2 (0.9)	13 (5.2)	853 (9.8)	21200 (15.2)
Location of Arrest (%)	N=225	N=249	N=8671	N=139819
Home/Residence	164 (72.9)	185 (74.3)	6191 (71.4)	99881 (71.4)
Nursing Home	19 (8.4)	19 (7.6)	1227 (14.2)	14557 (10.4)
Public Setting	42 (18.7)	45 (18.1)	1253 (14.5)	25381 (18.2)
Arrest witnessed (%)	N=225	N=249	N=8671	N=139822
Bystander Witnessed	89 (39.6)	90 (36.1)	3271 (37.7)	51336 (36.7)
Witnessed by 911 Responder	24 (10.7)	37 (14.9)	955 (11.0)	16540 (11.8)
Unwitnessed	112 (49.8)	122 (49.0)	4445 (51.3)	71946 (51.5)
Who Initiated CPR? (%)	N=225	N=249	N=8670	N=139810
Not Applicable	0 (0.0)	0 (0.0)	6 (0.1)	63 (0.0)
Bystander	103 (45.8)	102 (41.0)	3676 (42.4)	58016 (41.5)
First Responder (fire/rescue or police)	99 (44.0)	119 (47.8)	2684 (31.0)	43558 (31.2)
Emergency Medical Services (EMS) - Paramedics	23 (10.2)	28 (11.2)	2304 (26.6)	38173 (27.3)
Was an AED applied prior to Paramedic arrival? (%)	N=225	N=249	N=8671	N=139821
Yes	151 (67.1)	159 (63.9)	3201 (36.9)	40084 (28.7)
No	74 (32.9)	90 (36.1)	5470 (63.1)	99737 (71.3)
Who first applied automated external defibrillator? (%)	N=151	N=159	N=3202	N=40110
Bystander	20 (13.2)	15 (9.4)	873 (27.3)	8774 (21.9)
First Responder (fire/rescue or police)	131 (86.8)	144 (90.6)	2329 (72.7)	31336 (78.1)
Who first defibrillated the patient?*	N=225	N=247	N=8668	N=139800
Not Applicable	134 (59.6)	148 (59.9)	6001 (69.2)	98064 (70.1)
Bystander	6 (2.7)	3 (1.2)	174 (2.0)	2231 (1.6)
First Responder	35 (15.6)	42 (17.0)	582 (6.7)	8529 (6.1)
Responding EMS Personnel	50 (22.2)	54 (21.9)	1911 (22.0)	30976 (22.2)
First Arrest Rhythm (%)	N=225	N=249	N=8671	N=139807
Vfib/Vtach/Unknown Shockable Rhythm	49 (21.8)	52 (20.9)	1521 (17.5)	24517 (17.5)
Asystole	88 (39.1)	125 (50.2)	4368 (50.4)	72251 (51.7)
Idioventricular/PEA	62 (27.6)	45 (18.1)	1578 (18.2)	30884 (22.1)
Unknown Unshockable Rhythm	26 (11.6)	27 (10.8)	1204 (13.9)	12155 (8.7)
Sustained ROSC (%)	N=225	N=249	N=8671	N=139786
Yes	89 (39.6)	90 (36.1)	2448 (28.2)	37902 (27.1)
No	136 (60.4)	159 (63.9)	6223 (71.8)	101884 (72.9)
Pre-hospital Outcome (%)	N=225	N=249	N=8671	N=139822
Pronounced in the Field	123 (54.7)	123 (49.4)	4162 (48.0)	59972 (42.9)
Pronounced in ED	12 (5.3)	70 (28.1)	457 (5.3)	13315 (9.5)
Ongoing Resuscitation in ED	90 (40.0)	36 (14.5)	4052 (46.7)	66535 (47.6)
Overall Survival (%)	N=225	N=249	N=8671	N=139822
Overall Survival to Hospital Admission	72 (32.0)	1	2182 (25.2)	36492 (26.1)
Overall Survival to Hospital Discharge	31 (13.8)	N=29 48.3%	742 (8.6)	14300 (10.2)
With Good or Moderate Cerebral Performance	27 (12.0)	N=17 64.7%	584 (6.7)	11376 (8.1)
Missing hospital outcome	0	0	0	332
Cardiac Arrest Witnessed by Bystander and Initial Shockable Rhythm Survival (%)	N=23 65.2%	N=35 42.9%	N=927 29.1%	N=14558 32.8%
Cardiac Arrest Witnessed by Bystander and Initial Shockable Rhythm AND Bystander CPR/AED Survival (%)	N=15 60.0%	N=23 47.8%	N=542 32.8%	N=8840 36.3%

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.

**This is a new question that was introduced on the 2011 form.*

¹Witnessed by bystander and found in a shockable rhythm

²Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR by bystander and/or AED applied by bystander)