

CARES Survival Report

Incident State: MI | Service Date: 01/01/13 - 12/31/19 | Non-Traumatic Etiology

	OVERALL N = 35783				
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	35783	10245 (28.6)	9443 (26.4)	3090 (8.6)	2513 (7.0)
Location of Arrest					
Home/Residence	25222 (70.5)	6903 (27.4)	6413 (25.4)	1849 (7.3)	1476 (5.9)
Nursing Home	5220 (14.6)	1300 (24.9)	923 (17.7)	202 (3.9)	109 (2.1)
Public Setting	5341 (14.9)	2042 (38.2)	2107 (39.4)	1039 (19.5)	928 (17.4)
Arrest Witnessed Status					
Unwitnessed	18825 (52.6)	3661 (19.4)	3274 (17.4)	750 (4.0)	560 (3.0)
Bystander witnessed	13013 (36.4)	5090 (39.1)	4607 (35.4)	1736 (13.3)	1448 (11.1)
911 Responder witnessed	3944 (11.0)	1493 (37.9)	1561 (39.6)	603 (15.3)	505 (12.8)
Bystander CPR*					
Bystander CPR	14347 (45.1)	4284 (29.9)	3770 (26.3)	1400 (9.8)	1151 (8.0)
No Bystander CPR	17490 (54.9)	4467 (25.5)	4111 (23.5)	1086 (6.2)	856 (4.9)
Bystander CPR (excludes nursing home/healthcare facility events)	9364 (36.0)	2949 (31.5)	2776 (29.6)	1134 (12.1)	979 (10.5)
No Bystander CPR (excludes nursing home/healthcare facility events)	16622 (64.0)	4219 (25.4)	3923 (23.6)	1038 (6.2)	824 (5.0)
Initial Arrest Rhythm					
Shockable	6355 (17.8)	2792 (43.9)	2756 (43.4)	1594 (25.1)	1433 (22.5)
Non-shockable	29426 (82.2)	7453 (25.3)	6687 (22.7)	1496 (5.1)	1080 (3.7)
AED Use					
Bystander AED use*	2879 (9.0)	922 (32.0)	779 (27.1)	347 (12.1)	287 (10.0)
Bystander AED use* (excludes nursing home/healthcare facility events)	581 (2.2)	280 (48.2)	280 (48.2)	187 (32.2)	179 (30.8)
Trained provider (First Responder) AED use	8938 (25.0)	2692 (30.1)	2350 (26.3)	819 (9.2)	698 (7.8)
Utstein					
Witnessed and shockable	4354 (12.2)	2141 (49.2)	2114 (48.6)	1298 (29.8)	1186 (27.2)
Bystander witnessed and shockable	3623 (10.1)	1751 (48.3)	1730 (47.8)	1033 (28.5)	937 (25.9)
Hypothermia					
Field hypothermia	213 (0.6)	147 (69.0)	122 (57.3)	42 (19.7)	36 (16.9)
In-hospital hypothermia (among admitted patients)	4181 (44.3)	--	--	1242 (29.7)	911 (21.8)

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.

NOTE: Analysis excludes patients with missing hospital outcome (N=14).

*Bystander CPR and bystander AED use calculations exclude 911 Responder witnessed events.

[†]CPC missing for 0 patients.

CARES Survival Report

Incident State: MI | Service Date: 01/01/13 - 12/31/19 | Non-Traumatic Etiology

	Age = <1 years N = 517				
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	517	51 (9.9)	80 (15.5)	18 (3.5)	13 (2.5)
Location of Arrest					
Home/Residence	493 (95.4)	49 (9.9)	78 (15.8)	18 (3.7)	13 (2.6)
Nursing Home	4 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Public Setting	20 (3.9)	2 (10.0)	2 (10.0)	0 (0.0)	0 (0.0)
Arrest Witnessed Status					
Unwitnessed	427 (82.6)	29 (6.8)	55 (12.9)	9 (2.1)	6 (1.4)
Bystander witnessed	76 (14.7)	20 (26.3)	22 (28.9)	7 (9.2)	6 (7.9)
911 Responder witnessed	14 (2.7)	2 (14.3)	3 (21.4)	2 (14.3)	1 (7.1)
Bystander CPR*					
Bystander CPR	227 (45.1)	24 (10.6)	35 (15.4)	11 (4.8)	8 (3.5)
No Bystander CPR	276 (54.9)	25 (9.1)	42 (15.2)	5 (1.8)	4 (1.4)
Bystander CPR (excludes nursing home/healthcare facility events)	222 (44.8)	24 (10.8)	35 (15.8)	11 (5.0)	8 (3.6)
No Bystander CPR (excludes nursing home/healthcare facility events)	274 (55.2)	25 (9.1)	41 (15.0)	5 (1.8)	4 (1.5)
Initial Arrest Rhythm					
Shockable	15 (2.9)	1 (6.7)	1 (6.7)	0 (0.0)	0 (0.0)
Non-shockable	502 (97.1)	50 (10.0)	79 (15.7)	18 (3.6)	13 (2.6)
AED Use					
Bystander AED use*	2 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Bystander AED use* (excludes nursing home/healthcare facility events)	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Trained provider (First Responder) AED use	90 (17.4)	7 (7.8)	13 (14.4)	1 (1.1)	0 (0.0)
Utstein					
Witnessed and shockable	8 (1.5)	1 (12.5)	1 (12.5)	0 (0.0)	0 (0.0)
Bystander witnessed and shockable	6 (1.2)	1 (16.7)	1 (16.7)	0 (0.0)	0 (0.0)
Hypothermia					
Field hypothermia	2 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
In-hospital hypothermia (among admitted patients)	8 (10.0)	--	--	4 (50.0)	3 (37.5)

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.

NOTE: Analysis excludes patients with missing hospital outcome (N=1).

*Bystander CPR and bystander AED use calculations exclude 911 Responder witnessed events.

[†]CPC missing for 0 patients.

CARES Survival Report

Incident State: MI | Service Date: 01/01/13 - 12/31/19 | Non-Traumatic Etiology

	Age = 1 - 12 years N = 286				
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	286	59 (20.6)	76 (26.6)	32 (11.2)	28 (9.8)
Location of Arrest					
Home/Residence	249 (87.1)	41 (16.5)	57 (22.9)	20 (8.0)	16 (6.4)
Nursing Home	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Public Setting	37 (12.9)	18 (48.6)	19 (51.4)	12 (32.4)	12 (32.4)
Arrest Witnessed Status					
Unwitnessed	189 (66.1)	27 (14.3)	41 (21.7)	13 (6.9)	10 (5.3)
Bystander witnessed	81 (28.3)	29 (35.8)	30 (37.0)	15 (18.5)	15 (18.5)
911 Responder witnessed	16 (5.6)	3 (18.8)	5 (31.2)	4 (25.0)	3 (18.8)
Bystander CPR*					
Bystander CPR	124 (45.9)	35 (28.2)	44 (35.5)	20 (16.1)	19 (15.3)
No Bystander CPR	146 (54.1)	21 (14.4)	27 (18.5)	8 (5.5)	6 (4.1)
Bystander CPR (excludes nursing home/healthcare facility events)	121 (45.3)	35 (28.9)	44 (36.4)	20 (16.5)	19 (15.7)
No Bystander CPR (excludes nursing home/healthcare facility events)	146 (54.7)	21 (14.4)	27 (18.5)	8 (5.5)	6 (4.1)
Initial Arrest Rhythm					
Shockable	19 (6.6)	9 (47.4)	8 (42.1)	6 (31.6)	6 (31.6)
Non-shockable	267 (93.4)	50 (18.7)	68 (25.5)	26 (9.7)	22 (8.2)
AED Use					
Bystander AED use*	6 (2.2)	4 (66.7)	5 (83.3)	3 (50.0)	3 (50.0)
Bystander AED use* (excludes nursing home/healthcare facility events)	5 (1.9)	4 (80.0)	5 (100.0)	3 (60.0)	3 (60.0)
Trained provider (First Responder) AED use	68 (23.8)	15 (22.1)	16 (23.5)	5 (7.4)	4 (5.9)
Utstein					
Witnessed and shockable	13 (4.5)	9 (69.2)	8 (61.5)	6 (46.2)	6 (46.2)
Bystander witnessed and shockable	12 (4.2)	9 (75.0)	7 (58.3)	5 (41.7)	5 (41.7)
Hypothermia					
Field hypothermia	3 (1.0)	2 (66.7)	2 (66.7)	1 (33.3)	1 (33.3)
In-hospital hypothermia (among admitted patients)	14 (18.4)	--	--	5 (35.7)	5 (35.7)

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.

NOTE: Analysis excludes patients with missing hospital outcome (N=0).

*Bystander CPR and bystander AED use calculations exclude 911 Responder witnessed events.

[†]CPC missing for 0 patients.

CARES Survival Report

Incident State: MI | Service Date: 01/01/13 - 12/31/19 | Non-Traumatic Etiology

	Age = 13 - 18 years N = 199				
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	199	59 (29.6)	75 (37.7)	27 (13.6)	21 (10.6)
Location of Arrest					
Home/Residence	159 (79.9)	42 (26.4)	49 (30.8)	11 (6.9)	7 (4.4)
Nursing Home	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Public Setting	40 (20.1)	17 (42.5)	26 (65.0)	16 (40.0)	14 (35.0)
Arrest Witnessed Status					
Unwitnessed	122 (61.3)	25 (20.5)	32 (26.2)	8 (6.6)	5 (4.1)
Bystander witnessed	66 (33.2)	31 (47.0)	38 (57.6)	18 (27.3)	16 (24.2)
911 Responder witnessed	11 (5.5)	3 (27.3)	5 (45.5)	1 (9.1)	0 (0.0)
Bystander CPR*					
Bystander CPR	77 (41.0)	30 (39.0)	35 (45.5)	16 (20.8)	15 (19.5)
No Bystander CPR	111 (59.0)	26 (23.4)	35 (31.5)	10 (9.0)	6 (5.4)
Bystander CPR (excludes nursing home/healthcare facility events)	76 (40.6)	30 (39.5)	34 (44.7)	16 (21.1)	15 (19.7)
No Bystander CPR (excludes nursing home/healthcare facility events)	111 (59.4)	26 (23.4)	35 (31.5)	10 (9.0)	6 (5.4)
Initial Arrest Rhythm					
Shockable	36 (18.1)	16 (44.4)	23 (63.9)	16 (44.4)	14 (38.9)
Non-shockable	163 (81.9)	43 (26.4)	52 (31.9)	11 (6.7)	7 (4.3)
AED Use					
Bystander AED use*	9 (4.8)	5 (55.6)	8 (88.9)	5 (55.6)	5 (55.6)
Bystander AED use* (excludes nursing home/healthcare facility events)	8 (4.3)	5 (62.5)	7 (87.5)	5 (62.5)	5 (62.5)
Trained provider (First Responder) AED use	59 (29.6)	20 (33.9)	23 (39.0)	6 (10.2)	5 (8.5)
Utstein					
Witnessed and shockable	27 (13.6)	13 (48.1)	18 (66.7)	13 (48.1)	12 (44.4)
Bystander witnessed and shockable	24 (12.1)	13 (54.2)	17 (70.8)	13 (54.2)	12 (50.0)
Hypothermia					
Field hypothermia	1 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
In-hospital hypothermia (among admitted patients)	20 (26.7)	--	--	10 (50.0)	6 (30.0)

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.

NOTE: Analysis excludes patients with missing hospital outcome (N=0).

*Bystander CPR and bystander AED use calculations exclude 911 Responder witnessed events.

[†]CPC missing for 0 patients.

CARES Survival Report

Incident State: MI | Service Date: 01/01/13 - 12/31/19 | Non-Traumatic Etiology

	Age = >18 years N = 34733				
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	34733	10068 (29.0)	9201 (26.5)	3011 (8.7)	2449 (7.1)
Location of Arrest					
Home/Residence	24284 (69.9)	6765 (27.9)	6220 (25.6)	1800 (7.4)	1440 (5.9)
Nursing Home	5214 (15.0)	1300 (24.9)	923 (17.7)	202 (3.9)	109 (2.1)
Public Setting	5235 (15.1)	2003 (38.3)	2058 (39.3)	1009 (19.3)	900 (17.2)
Arrest Witnessed Status					
Unwitnessed	18067 (52.0)	3577 (19.8)	3142 (17.4)	720 (4.0)	539 (3.0)
Bystander witnessed	12771 (36.8)	5007 (39.2)	4512 (35.3)	1695 (13.3)	1410 (11.0)
911 Responder witnessed	3894 (11.2)	1483 (38.1)	1546 (39.7)	595 (15.3)	500 (12.8)
Bystander CPR*					
Bystander CPR	13909 (45.1)	4194 (30.2)	3653 (26.3)	1352 (9.7)	1108 (8.0)
No Bystander CPR	16928 (54.9)	4390 (25.9)	4001 (23.6)	1063 (6.3)	840 (5.0)
Bystander CPR (excludes nursing home/healthcare facility events)	8938 (35.8)	2860 (32.0)	2661 (29.8)	1087 (12.2)	937 (10.5)
No Bystander CPR (excludes nursing home/healthcare facility events)	16062 (64.2)	4142 (25.8)	3814 (23.7)	1015 (6.3)	808 (5.0)
Initial Arrest Rhythm					
Shockable	6283 (18.1)	2766 (44.0)	2724 (43.4)	1572 (25.0)	1413 (22.5)
Non-shockable	28448 (81.9)	7302 (25.7)	6477 (22.8)	1439 (5.1)	1036 (3.6)
AED Use					
Bystander AED use*	2861 (9.3)	913 (31.9)	766 (26.8)	339 (11.8)	279 (9.8)
Bystander AED use* (excludes nursing home/healthcare facility events)	568 (2.3)	271 (47.7)	268 (47.2)	179 (31.5)	171 (30.1)
Trained provider (First Responder) AED use	8720 (25.1)	2650 (30.4)	2298 (26.4)	807 (9.3)	689 (7.9)
Utstein					
Witnessed and shockable	4304 (12.4)	2118 (49.2)	2087 (48.5)	1279 (29.7)	1168 (27.1)
Bystander witnessed and shockable	3579 (10.3)	1728 (48.3)	1705 (47.6)	1015 (28.4)	920 (25.7)
Hypothermia					
Field hypothermia	207 (0.6)	145 (70.0)	120 (58.0)	41 (19.8)	35 (16.9)
In-hospital hypothermia (among admitted patients)	4136 (45.0)	--	--	1223 (29.6)	897 (21.7)

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.

NOTE: Analysis excludes patients with missing hospital outcome (N=13).

*Bystander CPR and bystander AED use calculations exclude 911 Responder witnessed events.

[†]CPC missing for 0 patients.