

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	Montana N=656	N=137119
Age	N=656	N=137100
Mean	62.3	63.1
Median	65.0	66.0
Sex (%)	N=655	N=137106
Female	214 (32.7)	50482 (36.8)
Male	441 (67.3)	86624 (63.2)
Race (%)	N=656	N=137113
American-Indian/Alaskan	32 (4.9)	560 (0.4)
Asian	4 (0.6)	4100 (3.0)
Black/African-American	7 (1.1)	29454 (21.5)
Hispanic/Latino	6 (0.9)	12726 (9.3)
Native Hawaiian/Pacific Islander	0 (0.0)	619 (0.5)
White	554 (84.5)	71936 (52.5)
Multi-racial	2 (0.3)	712 (0.5)
Unknown	51 (7.8)	17006 (12.4)
Location of Arrest (%)	N=656	N=137117
Home/Residence	469 (71.5)	97774 (71.3)
Nursing Home	35 (5.3)	14730 (10.7)
Public Setting	152 (23.2)	24613 (18.0)
Arrest witnessed (%)	N=656	N=137118
Bystander Witnessed	299 (45.6)	51419 (37.5)
Witnessed by 911 Responder	61 (9.3)	16859 (12.3)
Unwitnessed	296 (45.1)	68840 (50.2)
Who Initiated CPR? (%)	N=656	N=136786
Not Applicable	0 (0.0)	42 (0.0)
Bystander	309 (47.1)	57289 (41.9)
First Responder	250 (38.1)	42529 (31.1)
Emergency Medical Services (EMS)	97 (14.8)	36926 (27.0)
Was an AED applied prior to EMS arrival? (%)	N=656	N=137116
Yes	252 (38.4)	40031 (29.2)
No	404 (61.6)	97085 (70.8)
Who first applied automated external defibrillator? (%)	N=280	N=40654
Bystander	35 (12.5)	9251 (22.8)
First Responder	245 (87.5)	31403 (77.2)
Who first defibrillated the patient?* (%)	N=656	N=137109
Not Applicable	452 (68.9)	95677 (69.8)
Bystander	11 (1.7)	2393 (1.7)
First Responder	91 (13.9)	9797 (7.1)
Responding EMS Personnel	102 (15.5)	29242 (21.3)
First Arrest Rhythm (%)	N=656	N=137101
Vfib/Vtach/Unknown Shockable Rhythm	123 (18.8)	24747 (18.1)
Asystole	329 (50.2)	69425 (50.6)
Idioventricular/PEA	138 (21.0)	30865 (22.5)
Unknown Unshockable Rhythm	66 (10.1)	12064 (8.8)
Sustained ROSC (%)	N=649	N=137071
Yes	138 (21.3)	34752 (25.4)
No	511 (78.7)	102319 (74.6)
Was hypothermia care provided in the field? (%)	N=653	N=137093
Yes	6 (0.9)	4384 (3.2)
No	647 (99.1)	132709 (96.8)
Pre-hospital Outcome (%)	N=656	N=137119
Pronounced in the Field	325 (49.5)	59026 (43.0)
Pronounced in ED	118 (18.0)	13579 (9.9)
Ongoing Resuscitation in ED	213 (32.5)	64514 (47.0)
Overall Survival (%)	N=656	N=137119
Overall Survival to Hospital Admission	134 (20.4)	35181 (25.7)
Overall Survival to Hospital Discharge	74 (11.3)	14390 (10.5)
With Good or Moderate Cerebral Performance	66 (10.1)	11280 (8.2)
Missing hospital outcome	1	334
Utstein¹ Survival (%)	N=80	N=14844
	36.2%	33.4%
Utstein Bystander² Survival (%)	N=46	N=9007
	39.1%	37.6%

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)

CARES Survival Report

Incident State: MT | Date of Arrest: 01/01/24 - 12/31/24 | Non-Traumatic Etiology

	OVERALL N = 655				
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	655	137 (20.9)	134 (20.5)	74 (11.3)	66 (10.1)
Location of Arrest					
Home/Residence	469 (71.6)	88 (18.8)	81 (17.3)	39 (8.3)	36 (7.7)
Nursing Home	35 (5.3)	6 (17.1)	4 (11.4)	3 (8.6)	1 (2.9)
Public Setting	151 (23.1)	43 (28.5)	49 (32.5)	32 (21.2)	29 (19.2)
Arrest Witnessed Status					
Unwitnessed	296 (45.2)	40 (13.5)	38 (12.8)	17 (5.7)	14 (4.7)
Bystander witnessed	298 (45.5)	82 (27.5)	77 (25.8)	46 (15.4)	43 (14.4)
911 Responder witnessed	61 (9.3)	15 (24.6)	19 (31.1)	11 (18.0)	9 (14.8)
Bystander CPR*					
Bystander CPR	306 (51.5)	74 (24.2)	67 (21.9)	38 (12.4)	33 (10.8)
No Bystander CPR	288 (48.5)	48 (16.7)	48 (16.7)	25 (8.7)	24 (8.3)
Bystander CPR (excludes nursing home/healthcare facility events)	270 (49.2)	62 (23.0)	59 (21.9)	33 (12.2)	31 (11.5)
No Bystander CPR (excludes nursing home/healthcare facility events)	279 (50.8)	48 (17.2)	48 (17.2)	25 (9.0)	24 (8.6)
Initial Arrest Rhythm					
Shockable	122 (18.6)	46 (37.7)	48 (39.3)	38 (31.1)	35 (28.7)
Non-shockable	533 (81.4)	91 (17.1)	86 (16.1)	36 (6.8)	31 (5.8)
AED Use					
Bystander AED use*	34 (5.7)	11 (32.4)	9 (26.5)	6 (17.6)	5 (14.7)
Bystander AED use* (excludes nursing home/healthcare facility events)	15 (2.7)	3 (20.0)	5 (33.3)	3 (20.0)	3 (20.0)
Trained provider (First Responder) AED use	245 (37.4)	49 (20.0)	46 (18.8)	30 (12.2)	28 (11.4)
Utstein					
Witnessed and shockable	91 (13.9)	40 (44.0)	41 (45.1)	33 (36.3)	31 (34.1)
Bystander witnessed and shockable	79 (12.1)	35 (44.3)	36 (45.6)	29 (36.7)	28 (35.4)
Hypothermia					
Field hypothermia	6 (0.9)	4 (66.7)	6 (100.0)	4 (66.7)	2 (33.3)
In-hospital hypothermia/TTM (among admitted patients)	29 (21.6)	--	--	14 (48.3)	11 (37.9)

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: MT | Date of Arrest: 01/01/24 - 12/31/24 | Non-Traumatic Etiology

Age = <1 years N = 11					
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	11	2 (18.2)	2 (18.2)	2 (18.2)	2 (18.2)
Location of Arrest					
Home/Residence	9 (81.8)	2 (22.2)	2 (22.2)	2 (22.2)	2 (22.2)
Nursing Home	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Public Setting	2 (18.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Arrest Witnessed Status					
Unwitnessed	8 (72.7)	1 (12.5)	1 (12.5)	1 (12.5)	1 (12.5)
Bystander witnessed	3 (27.3)	1 (33.3)	1 (33.3)	1 (33.3)	1 (33.3)
911 Responder witnessed	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Bystander CPR*					
Bystander CPR	4 (36.4)	1 (25.0)	1 (25.0)	1 (25.0)	1 (25.0)
No Bystander CPR	7 (63.6)	1 (14.3)	1 (14.3)	1 (14.3)	1 (14.3)
Bystander CPR (excludes nursing home/healthcare facility events)	4 (36.4)	1 (25.0)	1 (25.0)	1 (25.0)	1 (25.0)
No Bystander CPR (excludes nursing home/healthcare facility events)	7 (63.6)	1 (14.3)	1 (14.3)	1 (14.3)	1 (14.3)
Initial Arrest Rhythm					
Shockable	1 (9.1)	1 (100.0)	1 (100.0)	1 (100.0)	1 (100.0)
Non-shockable	10 (90.9)	1 (10.0)	1 (10.0)	1 (10.0)	1 (10.0)
AED Use					
Bystander AED use*	1 (9.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Bystander AED use* (excludes nursing home/healthcare facility events)	1 (9.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Trained provider (First Responder) AED use	4 (36.4)	2 (50.0)	2 (50.0)	2 (50.0)	2 (50.0)
Utstein					
Witnessed and shockable	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Bystander witnessed and shockable	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Hypothermia					
Field hypothermia	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
In-hospital hypothermia/TTM (among admitted patients)	0 (0.0)	--	--	0 (NaN)	0 (NaN)

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: MT | Date of Arrest: 01/01/24 - 12/31/24 | Non-Traumatic Etiology

Age = 1 - 12 years N = 3					
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	3	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Location of Arrest					
Home/Residence	3 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Nursing Home	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Public Setting	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Arrest Witnessed Status					
Unwitnessed	3 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Bystander witnessed	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
911 Responder witnessed	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Bystander CPR*					
Bystander CPR	1 (33.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
No Bystander CPR	2 (66.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Bystander CPR (excludes nursing home/healthcare facility events)	1 (33.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
No Bystander CPR (excludes nursing home/healthcare facility events)	2 (66.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Initial Arrest Rhythm					
Shockable	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Non-shockable	3 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
AED Use					
Bystander AED use*	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
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	1 (33.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Utstein					
Witnessed and shockable	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Bystander witnessed and shockable	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Hypothermia					
Field hypothermia	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
In-hospital hypothermia/TTM (among admitted patients)	0 (NaN)	--	--	0 (NaN)	0 (NaN)

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: MT | Date of Arrest: 01/01/24 - 12/31/24 | Non-Traumatic Etiology

Age = 13 - 18 years N = 3					
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	3	0 (0.0)	2 (66.7)	1 (33.3)	1 (33.3)
Location of Arrest					
Home/Residence	2 (66.7)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)
Nursing Home	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Public Setting	1 (33.3)	0 (0.0)	1 (100.0)	1 (100.0)	1 (100.0)
Arrest Witnessed Status					
Unwitnessed	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Bystander witnessed	3 (100.0)	0 (0.0)	2 (66.7)	1 (33.3)	1 (33.3)
911 Responder witnessed	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
Bystander CPR*					
Bystander CPR	2 (66.7)	0 (0.0)	1 (50.0)	1 (50.0)	1 (50.0)
No Bystander CPR	1 (33.3)	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)
Bystander CPR (excludes nursing home/healthcare facility events)	2 (66.7)	0 (0.0)	1 (50.0)	1 (50.0)	1 (50.0)
No Bystander CPR (excludes nursing home/healthcare facility events)	1 (33.3)	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)
Initial Arrest Rhythm					
Shockable	1 (33.3)	0 (0.0)	1 (100.0)	1 (100.0)	1 (100.0)
Non-shockable	2 (66.7)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)
AED Use					
Bystander AED use*	1 (33.3)	0 (0.0)	1 (100.0)	1 (100.0)	1 (100.0)
Bystander AED use* (excludes nursing home/healthcare facility events)	1 (33.3)	0 (0.0)	1 (100.0)	1 (100.0)	1 (100.0)
Trained provider (First Responder) AED use	2 (66.7)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)
Utstein					
Witnessed and shockable	1 (33.3)	0 (0.0)	1 (100.0)	1 (100.0)	1 (100.0)
Bystander witnessed and shockable	1 (33.3)	0 (0.0)	1 (100.0)	1 (100.0)	1 (100.0)
Hypothermia					
Field hypothermia	0 (0.0)	0 (NaN)	0 (NaN)	0 (NaN)	0 (NaN)
In-hospital hypothermia/TTM (among admitted patients)	1 (50.0)	--	--	1 (100.0)	1 (100.0)

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=1).

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

[†]CPC missing for 0 patients.

CARES Survival Report

Incident State: MT | Date of Arrest: 01/01/24 - 12/31/24 | Non-Traumatic Etiology

Age = >18 years N = 638					
	Total N (%)	Sustained ROSC (%)	Survival to hospital admission (%)	Survival to hospital discharge (%)	Survival to discharge with CPC 1 or 2 [†] (%)
Total	638	135 (21.2)	130 (20.4)	71 (11.1)	63 (9.9)
Location of Arrest					
Home/Residence	455 (71.3)	86 (18.9)	78 (17.1)	37 (8.1)	34 (7.5)
Nursing Home	35 (5.5)	6 (17.1)	4 (11.4)	3 (8.6)	1 (2.9)
Public Setting	148 (23.2)	43 (29.1)	48 (32.4)	31 (20.9)	28 (18.9)
Arrest Witnessed Status					
Unwitnessed	285 (44.7)	39 (13.7)	37 (13.0)	16 (5.6)	13 (4.6)
Bystander witnessed	292 (45.8)	81 (27.7)	74 (25.3)	44 (15.1)	41 (14.0)
911 Responder witnessed	61 (9.6)	15 (24.6)	19 (31.1)	11 (18.0)	9 (14.8)
Bystander CPR*					
Bystander CPR	299 (51.8)	73 (24.4)	65 (21.7)	36 (12.0)	31 (10.4)
No Bystander CPR	278 (48.2)	47 (16.9)	46 (16.5)	24 (8.6)	23 (8.3)
Bystander CPR (excludes nursing home/healthcare facility events)	263 (49.4)	61 (23.2)	57 (21.7)	31 (11.8)	29 (11.0)
No Bystander CPR (excludes nursing home/healthcare facility events)	269 (50.6)	47 (17.5)	46 (17.1)	24 (8.9)	23 (8.6)
Initial Arrest Rhythm					
Shockable	120 (18.8)	45 (37.5)	46 (38.3)	36 (30.0)	33 (27.5)
Non-shockable	518 (81.2)	90 (17.4)	84 (16.2)	35 (6.8)	30 (5.8)
AED Use					
Bystander AED use*	32 (5.5)	11 (34.4)	8 (25.0)	5 (15.6)	4 (12.5)
Bystander AED use* (excludes nursing home/healthcare facility events)	13 (2.4)	3 (23.1)	4 (30.8)	2 (15.4)	2 (15.4)
Trained provider (First Responder) AED use	238 (37.3)	47 (19.7)	43 (18.1)	28 (11.8)	26 (10.9)
Utstein					
Witnessed and shockable	90 (14.1)	40 (44.4)	40 (44.4)	32 (35.6)	30 (33.3)
Bystander witnessed and shockable	78 (12.2)	35 (44.9)	35 (44.9)	28 (35.9)	27 (34.6)
Hypothermia					
Field hypothermia	6 (0.9)	4 (66.7)	6 (100.0)	4 (66.7)	2 (33.3)
In-hospital hypothermia/TTM (among admitted patients)	28 (21.5)	--	--	13 (46.4)	10 (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).

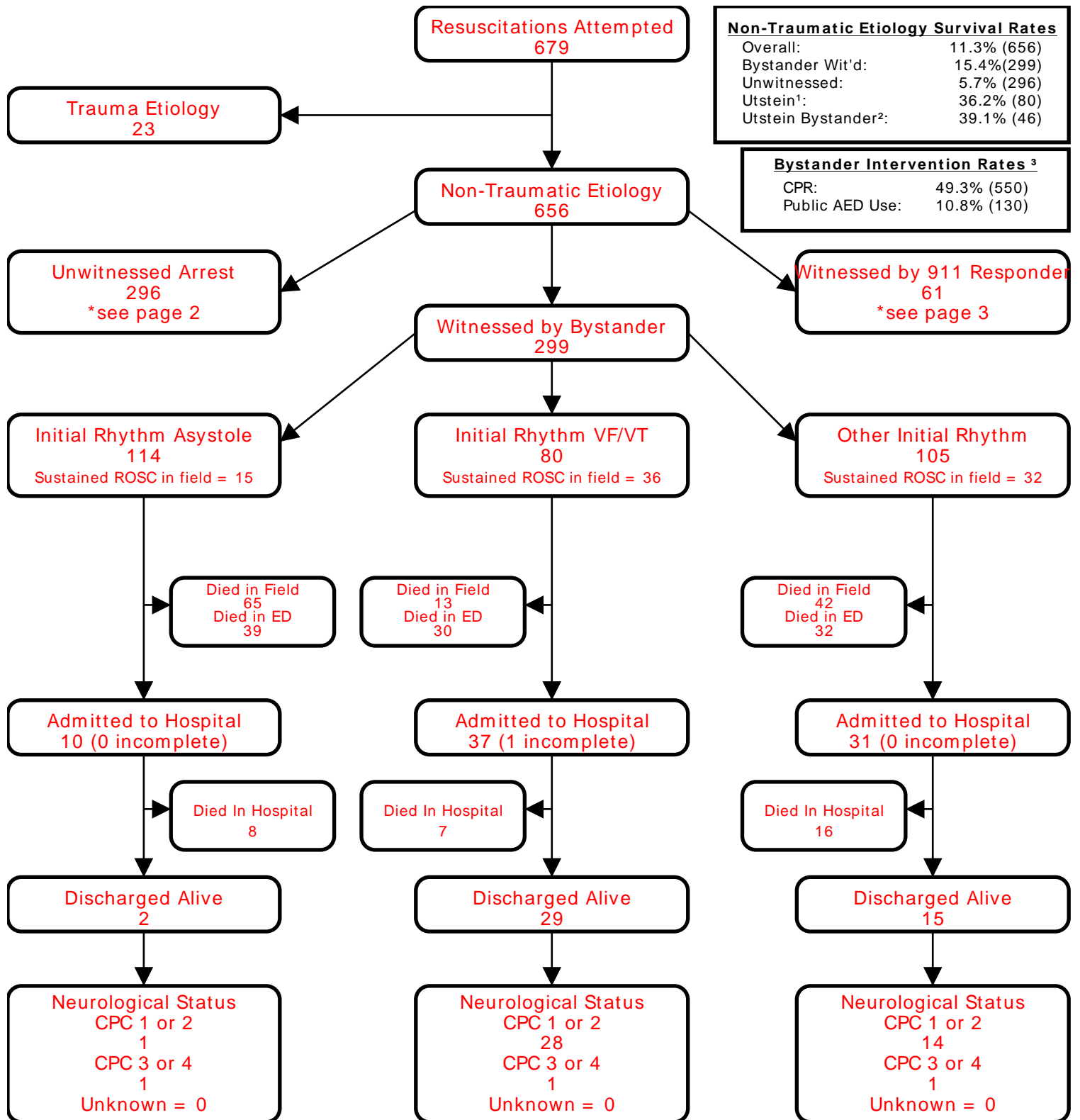
*Bystander CPR and bystander AED use calculations exclude 911 Responder witnessed events.

[†]CPC missing for 0 patients.

Utstein Survival Report

All Agencies

Incident State: MT | Date of Arrest: 01/01/24 - 12/31/24



¹Utstein: Witnessed by bystander and found in shockable rhythm.

²Utstein Bystander: Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR and/or AED application).

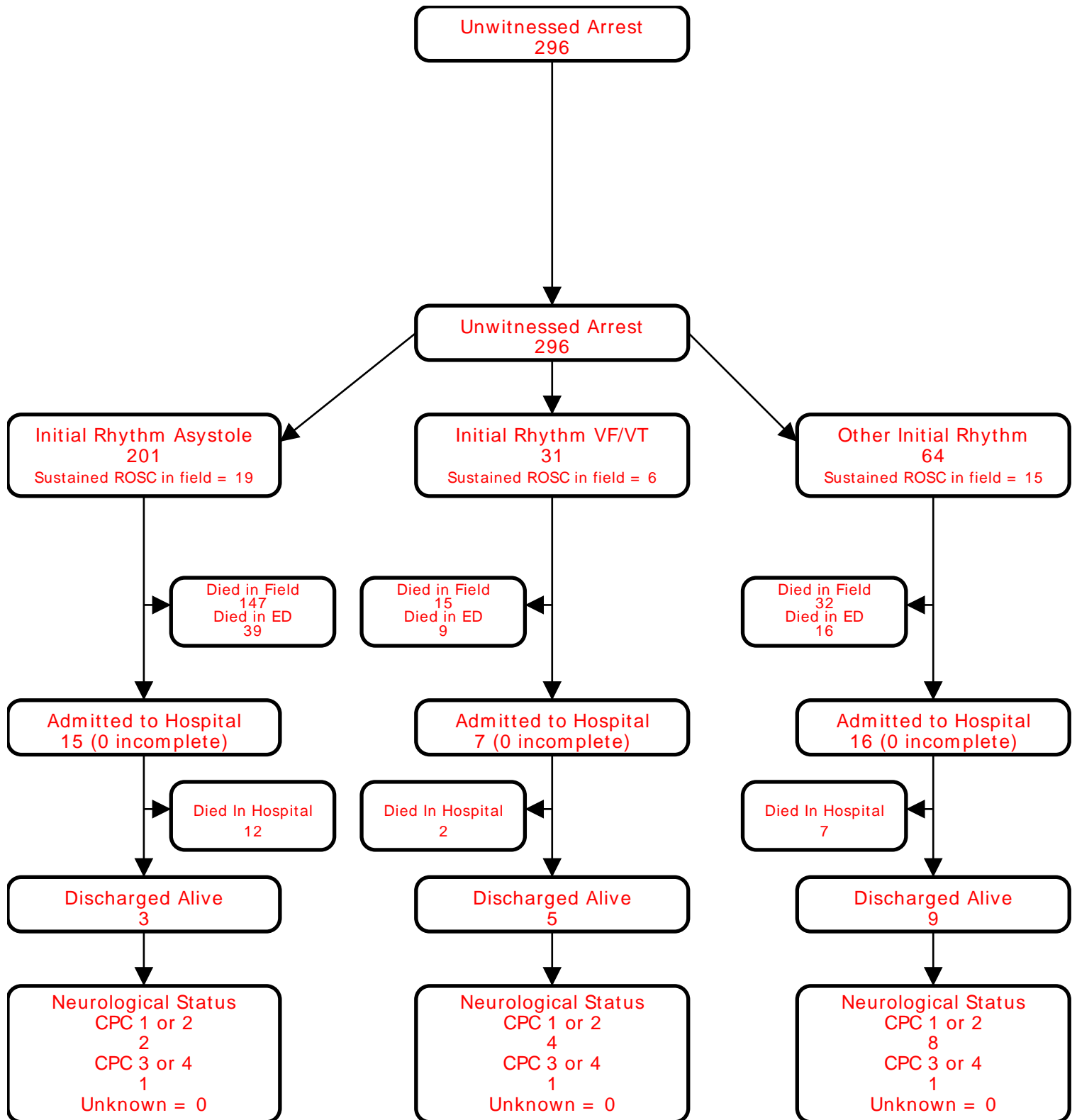
³Bystander CPR rate excludes 911 Responder Witnessed, Nursing Home, and Healthcare Facility arrests. Public AED Use rate excludes 911 Responder Witnessed, Home/Residence, Nursing Home, and Healthcare Facility arrests.

*Only data from the previous calendar year is fully audited. Data from the current calendar year is dynamic.

Utstein Survival Report

All Agencies

Incident State: MT | Date of Arrest: 01/01/24 - 12/31/24



Utstein Survival Report

All Agencies

Incident State: MT | Date of Arrest: 01/01/24 - 12/31/24

