

# CARES Survival Report

Incident State: PA | Date of Arrest: 01/01/23 - 12/31/23 | Non-Traumatic Etiology

|   | OVERALL<br>N = 7068 |                    |                                    |                                    |  |
|---|---------------------|--------------------|------------------------------------|------------------------------------|--|
|   | Total N (%)         | Sustained ROSC (%) | Survival to hospital admission (%) | Survival to hospital discharge (%) | Survival to discharge with CPC 1 or 2 <sup>†</sup> (%) |
| <b>Total</b>  | 7068                | 2109 (29.8)        | 1869 (26.4)                        | 624 (8.8)                          | 487 (6.9)  |
| <b>Location of Arrest</b>   |                     |                    |                                    |                                    |  |
| Home/Residence  | 5056 (71.5)         | 1446 (28.6)        | 1253 (24.8)                        | 356 (7.0)                          | 269 (5.3)  |
| Nursing Home  | 817 (11.6)          | 179 (21.9)         | 119 (14.6)                         | 30 (3.7)                           | 15 (1.8)   |
| Public Setting  | 1195 (16.9)         | 484 (40.5)         | 497 (41.6)                         | 238 (19.9)                         | 203 (17.0)   |
| <b>Arrest Witnessed Status</b>  |                     |                    |                                    |                                    |  |
| Unwitnessed   | 3609 (51.1)         | 715 (19.8)         | 614 (17.0)                         | 154 (4.3)                          | 99 (2.7)   |
| Bystander witnessed   | 2596 (36.7)         | 1036 (39.9)        | 902 (34.7)                         | 329 (12.7)                         | 273 (10.5)   |
| 911 Responder witnessed   | 863 (12.2)          | 358 (41.5)         | 353 (40.9)                         | 141 (16.3)                         | 115 (13.3)   |
| <b>Bystander CPR*</b>   |                     |                    |                                    |                                    |  |
| Bystander CPR   | 2777 (44.8)         | 776 (27.9)         | 671 (24.2)                         | 244 (8.8)                          | 204 (7.3)  |
| No Bystander CPR  | 3428 (55.2)         | 975 (28.4)         | 845 (24.6)                         | 239 (7.0)                          | 168 (4.9)  |
| Bystander CPR (excludes nursing home/healthcare facility events)      | 1921 (36.5)         | 583 (30.3)         | 524 (27.3)                         | 196 (10.2)                         | 171 (8.9)  |
| No Bystander CPR (excludes nursing home/healthcare facility events)   | 3348 (63.5)         | 944 (28.2)         | 826 (24.7)                         | 233 (7.0)                          | 164 (4.9)  |
| <b>Initial Arrest Rhythm</b>  |                     |                    |                                    |                                    |  |
| Shockable   | 1125 (15.9)         | 553 (49.2)         | 533 (47.4)                         | 317 (28.2)                         | 279 (24.8)   |
| Non-shockable   | 5943 (84.1)         | 1556 (26.2)        | 1336 (22.5)                        | 307 (5.2)                          | 208 (3.5)  |
| <b>AED Use</b>  |                     |                    |                                    |                                    |  |
| Bystander AED use*  | 753 (12.1)          | 199 (26.4)         | 163 (21.6)                         | 80 (10.6)                          | 66 (8.8)   |
| Bystander AED use* (excludes nursing home/healthcare facility events) | 126 (2.4)           | 54 (42.9)          | 53 (42.1)                          | 41 (32.5)                          | 41 (32.5)  |
| Trained provider (First Responder) AED use                            | 2128 (30.1)         | 584 (27.4)         | 504 (23.7)                         | 162 (7.6)                          | 123 (5.8)  |
| <b>Utstein</b>  |                     |                    |                                    |                                    |  |
| Witnessed and shockable   | 798 (11.3)          | 438 (54.9)         | 413 (51.8)                         | 259 (32.5)                         | 235 (29.4)   |
| Bystander witnessed and shockable                                     | 665 (9.4)           | 357 (53.7)         | 343 (51.6)                         | 209 (31.4)                         | 187 (28.1)   |
| <b>Hypothermia</b>  |                     |                    |                                    |                                    |  |
| Field hypothermia   | 36 (0.5)            | 22 (61.1)          | 16 (44.4)                          | 6 (16.7)                           | 6 (16.7)   |
| In-hospital hypothermia/TTM (among admitted patients)                 | 897 (48.0)          | --                 | --                                 | 242 (27.0)                         | 161 (17.9)   |

**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=38).

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

<sup>†</sup>CPC missing for 4 patients.

# CARES Survival Report

Incident State: PA | Date of Arrest: 01/01/23 - 12/31/23 | Non-Traumatic Etiology

|   | Age = <1 years<br>N = 84 |                    |                                    |                                    |  |
|---|--------------------------|--------------------|------------------------------------|------------------------------------|--|
|   | Total N (%)              | Sustained ROSC (%) | Survival to hospital admission (%) | Survival to hospital discharge (%) | Survival to discharge with CPC 1 or 2 <sup>†</sup> (%) |
| <b>Total</b>  | 84                       | 11 (13.1)          | 15 (17.9)                          | 5 (6.0)                            | 4 (4.8)  |
| <b>Location of Arrest</b>   |                          |                    |                                    |                                    |  |
| Home/Residence  | 79 (94.0)                | 10 (12.7)          | 15 (19.0)                          | 5 (6.3)                            | 4 (5.1)  |
| Nursing Home  | 0 (0.0)                  | 0 (NaN)            | 0 (NaN)                            | 0 (NaN)                            | 0 (NaN)  |
| Public Setting  | 5 (6.0)                  | 1 (20.0)           | 0 (0.0)                            | 0 (0.0)                            | 0 (0.0)  |
| <b>Arrest Witnessed Status</b>  |                          |                    |                                    |                                    |  |
| Unwitnessed   | 65 (77.4)                | 4 (6.2)            | 7 (10.8)                           | 1 (1.5)                            | 0 (0.0)  |
| Bystander witnessed   | 16 (19.0)                | 7 (43.8)           | 6 (37.5)                           | 4 (25.0)                           | 4 (25.0)   |
| 911 Responder witnessed   | 3 (3.6)                  | 0 (0.0)            | 2 (66.7)                           | 0 (0.0)                            | 0 (0.0)  |
| <b>Bystander CPR*</b>   |                          |                    |                                    |                                    |  |
| Bystander CPR   | 23 (28.4)                | 4 (17.4)           | 2 (8.7)                            | 2 (8.7)                            | 2 (8.7)  |
| No Bystander CPR  | 58 (71.6)                | 7 (12.1)           | 11 (19.0)                          | 3 (5.2)                            | 2 (3.4)  |
| Bystander CPR (excludes nursing home/healthcare facility events)      | 23 (28.4)                | 4 (17.4)           | 2 (8.7)                            | 2 (8.7)                            | 2 (8.7)  |
| No Bystander CPR (excludes nursing home/healthcare facility events)   | 58 (71.6)                | 7 (12.1)           | 11 (19.0)                          | 3 (5.2)                            | 2 (3.4)  |
| <b>Initial Arrest Rhythm</b>  |                          |                    |                                    |                                    |  |
| Shockable   | 2 (2.4)                  | 1 (50.0)           | 1 (50.0)                           | 0 (0.0)                            | 0 (0.0)  |
| Non-shockable   | 82 (97.6)                | 10 (12.2)          | 14 (17.1)                          | 5 (6.1)                            | 4 (4.9)  |
| <b>AED Use</b>  |                          |                    |                                    |                                    |  |
| 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                            | 22 (26.2)                | 2 (9.1)            | 3 (13.6)                           | 1 (4.5)                            | 0 (0.0)  |
| <b>Utstein</b>  |                          |                    |                                    |                                    |  |
| Witnessed and shockable   | 2 (2.4)                  | 1 (50.0)           | 1 (50.0)                           | 0 (0.0)                            | 0 (0.0)  |
| Bystander witnessed and shockable                                     | 1 (1.2)                  | 1 (100.0)          | 0 (0.0)                            | 0 (0.0)                            | 0 (0.0)  |
| <b>Hypothermia</b>  |                          |                    |                                    |                                    |  |
| Field hypothermia   | 1 (1.2)                  | 0 (0.0)            | 0 (0.0)                            | 0 (0.0)                            | 0 (0.0)  |
| In-hospital hypothermia/TTM (among admitted patients)                 | 6 (40.0)                 | --                 | --                                 | 2 (33.3)                           | 1 (16.7)   |

**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=4).

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

<sup>†</sup>CPC missing for 0 patients.

# CARES Survival Report

Incident State: PA | Date of Arrest: 01/01/23 - 12/31/23 | Non-Traumatic Etiology

|   | Age = 1 - 12 years |                    |                                    |                                    |  |
|---|--------------------|--------------------|------------------------------------|------------------------------------|--|
|   | N = 42             |                    |                                    |                                    |  |
|   | Total N (%)        | Sustained ROSC (%) | Survival to hospital admission (%) | Survival to hospital discharge (%) | Survival to discharge with CPC 1 or 2 <sup>†</sup> (%) |
| <b>Total</b>  | 42                 | 12 (28.6)          | 14 (33.3)                          | 7 (16.7)                           | 4 (9.5)  |
| <b>Location of Arrest</b>   |                    |                    |                                    |                                    |  |
| Home/Residence  | 34 (81.0)          | 9 (26.5)           | 11 (32.4)                          | 5 (14.7)                           | 2 (5.9)  |
| Nursing Home  | 0 (0.0)            | 0 (NaN)            | 0 (NaN)                            | 0 (NaN)                            | 0 (NaN)  |
| Public Setting  | 8 (19.0)           | 3 (37.5)           | 3 (37.5)                           | 2 (25.0)                           | 2 (25.0)   |
| <b>Arrest Witnessed Status</b>  |                    |                    |                                    |                                    |  |
| Unwitnessed   | 28 (66.7)          | 6 (21.4)           | 9 (32.1)                           | 3 (10.7)                           | 1 (3.6)  |
| Bystander witnessed   | 12 (28.6)          | 5 (41.7)           | 4 (33.3)                           | 3 (25.0)                           | 3 (25.0)   |
| 911 Responder witnessed   | 2 (4.8)            | 1 (50.0)           | 1 (50.0)                           | 1 (50.0)                           | 0 (0.0)  |
| <b>Bystander CPR*</b>   |                    |                    |                                    |                                    |  |
| Bystander CPR   | 18 (45.0)          | 4 (22.2)           | 5 (27.8)                           | 2 (11.1)                           | 2 (11.1)   |
| No Bystander CPR  | 22 (55.0)          | 7 (31.8)           | 8 (36.4)                           | 4 (18.2)                           | 2 (9.1)  |
| Bystander CPR (excludes nursing home/healthcare facility events)      | 16 (42.1)          | 3 (18.8)           | 4 (25.0)                           | 2 (12.5)                           | 2 (12.5)   |
| No Bystander CPR (excludes nursing home/healthcare facility events)   | 22 (57.9)          | 7 (31.8)           | 8 (36.4)                           | 4 (18.2)                           | 2 (9.1)  |
| <b>Initial Arrest Rhythm</b>  |                    |                    |                                    |                                    |  |
| Shockable   | 3 (7.1)            | 2 (66.7)           | 2 (66.7)                           | 2 (66.7)                           | 2 (66.7)   |
| Non-shockable   | 39 (92.9)          | 10 (25.6)          | 12 (30.8)                          | 5 (12.8)                           | 2 (5.1)  |
| <b>AED Use</b>  |                    |                    |                                    |                                    |  |
| Bystander AED use*  | 3 (7.5)            | 1 (33.3)           | 1 (33.3)                           | 1 (33.3)                           | 1 (33.3)   |
| Bystander AED use* (excludes nursing home/healthcare facility events) | 2 (5.3)            | 1 (50.0)           | 1 (50.0)                           | 1 (50.0)                           | 1 (50.0)   |
| Trained provider (First Responder) AED use                            | 6 (14.3)           | 1 (16.7)           | 2 (33.3)                           | 0 (0.0)                            | 0 (0.0)  |
| <b>Utstein</b>  |                    |                    |                                    |                                    |  |
| Witnessed and shockable   | 3 (7.1)            | 2 (66.7)           | 2 (66.7)                           | 2 (66.7)                           | 2 (66.7)   |
| Bystander witnessed and shockable                                     | 3 (7.1)            | 2 (66.7)           | 2 (66.7)                           | 2 (66.7)                           | 2 (66.7)   |
| <b>Hypothermia</b>  |                    |                    |                                    |                                    |  |
| Field hypothermia   | 0 (0.0)            | 0 (NaN)            | 0 (NaN)                            | 0 (NaN)                            | 0 (NaN)  |
| In-hospital hypothermia/TTM (among admitted patients)                 | 9 (64.3)           | --                 | --                                 | 5 (55.6)                           | 2 (22.2)   |

**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.

<sup>†</sup>CPC missing for 0 patients.

# CARES Survival Report

Incident State: PA | Date of Arrest: 01/01/23 - 12/31/23 | Non-Traumatic Etiology

|   | Age = 13 - 18 years<br>N = 25 |                    |                                    |                                    |  |
|---|-------------------------------|--------------------|------------------------------------|------------------------------------|--|
|   | Total N (%)                   | Sustained ROSC (%) | Survival to hospital admission (%) | Survival to hospital discharge (%) | Survival to discharge with CPC 1 or 2 <sup>†</sup> (%) |
| <b>Total</b>  | 25                            | 10 (40.0)          | 9 (36.0)                           | 3 (12.0)                           | 3 (12.0)   |
| <b>Location of Arrest</b>   |                               |                    |                                    |                                    |  |
| Home/Residence  | 19 (76.0)                     | 7 (36.8)           | 6 (31.6)                           | 0 (0.0)                            | 0 (0.0)  |
| Nursing Home  | 0 (0.0)                       | 0 (NaN)            | 0 (NaN)                            | 0 (NaN)                            | 0 (NaN)  |
| Public Setting  | 6 (24.0)                      | 3 (50.0)           | 3 (50.0)                           | 3 (50.0)                           | 3 (50.0)   |
| <b>Arrest Witnessed Status</b>  |                               |                    |                                    |                                    |  |
| Unwitnessed   | 15 (60.0)                     | 4 (26.7)           | 3 (20.0)                           | 1 (6.7)                            | 1 (6.7)  |
| Bystander witnessed   | 9 (36.0)                      | 6 (66.7)           | 6 (66.7)                           | 2 (22.2)                           | 2 (22.2)   |
| 911 Responder witnessed   | 1 (4.0)                       | 0 (0.0)            | 0 (0.0)                            | 0 (0.0)                            | 0 (0.0)  |
| <b>Bystander CPR*</b>   |                               |                    |                                    |                                    |  |
| Bystander CPR   | 16 (66.7)                     | 9 (56.2)           | 7 (43.8)                           | 2 (12.5)                           | 2 (12.5)   |
| No Bystander CPR  | 8 (33.3)                      | 1 (12.5)           | 2 (25.0)                           | 1 (12.5)                           | 1 (12.5)   |
| Bystander CPR (excludes nursing home/healthcare facility events)      | 16 (66.7)                     | 9 (56.2)           | 7 (43.8)                           | 2 (12.5)                           | 2 (12.5)   |
| No Bystander CPR (excludes nursing home/healthcare facility events)   | 8 (33.3)                      | 1 (12.5)           | 2 (25.0)                           | 1 (12.5)                           | 1 (12.5)   |
| <b>Initial Arrest Rhythm</b>  |                               |                    |                                    |                                    |  |
| Shockable   | 4 (16.0)                      | 3 (75.0)           | 3 (75.0)                           | 3 (75.0)                           | 3 (75.0)   |
| Non-shockable   | 21 (84.0)                     | 7 (33.3)           | 6 (28.6)                           | 0 (0.0)                            | 0 (0.0)  |
| <b>AED Use</b>  |                               |                    |                                    |                                    |  |
| Bystander AED use*  | 2 (8.3)                       | 2 (100.0)          | 2 (100.0)                          | 2 (100.0)                          | 2 (100.0)  |
| Bystander AED use* (excludes nursing home/healthcare facility events) | 2 (8.3)                       | 2 (100.0)          | 2 (100.0)                          | 2 (100.0)                          | 2 (100.0)  |
| Trained provider (First Responder) AED use                            | 10 (40.0)                     | 5 (50.0)           | 6 (60.0)                           | 1 (10.0)                           | 1 (10.0)   |
| <b>Utstein</b>  |                               |                    |                                    |                                    |  |
| Witnessed and shockable   | 3 (12.0)                      | 2 (66.7)           | 2 (66.7)                           | 2 (66.7)                           | 2 (66.7)   |
| Bystander witnessed and shockable                                     | 3 (12.0)                      | 2 (66.7)           | 2 (66.7)                           | 2 (66.7)                           | 2 (66.7)   |
| <b>Hypothermia</b>  |                               |                    |                                    |                                    |  |
| Field hypothermia   | 0 (0.0)                       | 0 (NaN)            | 0 (NaN)                            | 0 (NaN)                            | 0 (NaN)  |
| In-hospital hypothermia/TTM (among admitted patients)                 | 4 (44.4)                      | --                 | --                                 | 3 (75.0)                           | 3 (75.0)   |

**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.

<sup>†</sup>CPC missing for 0 patients.

# CARES Survival Report

Incident State: PA | Date of Arrest: 01/01/23 - 12/31/23 | Non-Traumatic Etiology

|   | Age = >18 years<br>N = 6912 |                    |                                    |                                    |  |
|---|-----------------------------|--------------------|------------------------------------|------------------------------------|--|
|   | Total N (%)                 | Sustained ROSC (%) | Survival to hospital admission (%) | Survival to hospital discharge (%) | Survival to discharge with CPC 1 or 2 <sup>†</sup> (%) |
| <b>Total</b>  | 6912                        | 2075 (30.0)        | 1831 (26.5)                        | 609 (8.8)                          | 476 (6.9)  |
| <b>Location of Arrest</b>   |                             |                    |                                    |                                    |  |
| Home/Residence  | 4921 (71.2)                 | 1419 (28.8)        | 1221 (24.8)                        | 346 (7.0)                          | 263 (5.3)  |
| Nursing Home  | 817 (11.8)                  | 179 (21.9)         | 119 (14.6)                         | 30 (3.7)                           | 15 (1.8)   |
| Public Setting  | 1174 (17.0)                 | 477 (40.6)         | 491 (41.8)                         | 233 (19.8)                         | 198 (16.9)   |
| <b>Arrest Witnessed Status</b>  |                             |                    |                                    |                                    |  |
| Unwitnessed   | 3500 (50.6)                 | 701 (20.0)         | 595 (17.0)                         | 149 (4.3)                          | 97 (2.8)   |
| Bystander witnessed   | 2556 (37.0)                 | 1017 (39.8)        | 886 (34.7)                         | 320 (12.5)                         | 264 (10.3)   |
| 911 Responder witnessed   | 856 (12.4)                  | 357 (41.7)         | 350 (40.9)                         | 140 (16.4)                         | 115 (13.4)   |
| <b>Bystander CPR*</b>   |                             |                    |                                    |                                    |  |
| Bystander CPR   | 2719 (44.9)                 | 759 (27.9)         | 657 (24.2)                         | 238 (8.8)                          | 198 (7.3)  |
| No Bystander CPR  | 3337 (55.1)                 | 959 (28.7)         | 824 (24.7)                         | 231 (6.9)                          | 163 (4.9)  |
| Bystander CPR (excludes nursing home/healthcare facility events)      | 1865 (36.4)                 | 567 (30.4)         | 511 (27.4)                         | 190 (10.2)                         | 165 (8.8)  |
| No Bystander CPR (excludes nursing home/healthcare facility events)   | 3257 (63.6)                 | 928 (28.5)         | 805 (24.7)                         | 225 (6.9)                          | 159 (4.9)  |
| <b>Initial Arrest Rhythm</b>  |                             |                    |                                    |                                    |  |
| Shockable   | 1116 (16.1)                 | 547 (49.0)         | 527 (47.2)                         | 312 (28.0)                         | 274 (24.6)   |
| Non-shockable   | 5796 (83.9)                 | 1528 (26.4)        | 1304 (22.5)                        | 297 (5.1)                          | 202 (3.5)  |
| <b>AED Use</b>  |                             |                    |                                    |                                    |  |
| Bystander AED use*  | 747 (12.3)                  | 196 (26.2)         | 160 (21.4)                         | 77 (10.3)                          | 63 (8.4)   |
| Bystander AED use* (excludes nursing home/healthcare facility events) | 122 (2.4)                   | 51 (41.8)          | 50 (41.0)                          | 38 (31.1)                          | 38 (31.1)  |
| Trained provider (First Responder) AED use                            | 2090 (30.2)                 | 576 (27.6)         | 493 (23.6)                         | 160 (7.7)                          | 122 (5.8)  |
| <b>Utstein</b>  |                             |                    |                                    |                                    |  |
| Witnessed and shockable   | 790 (11.4)                  | 433 (54.8)         | 408 (51.6)                         | 255 (32.3)                         | 231 (29.2)   |
| Bystander witnessed and shockable                                     | 658 (9.5)                   | 352 (53.5)         | 339 (51.5)                         | 205 (31.2)                         | 183 (27.8)   |
| <b>Hypothermia</b>  |                             |                    |                                    |                                    |  |
| Field hypothermia   | 35 (0.5)                    | 22 (62.9)          | 16 (45.7)                          | 6 (17.1)                           | 6 (17.1)   |
| In-hospital hypothermia/TTM (among admitted patients)                 | 878 (48.0)                  | --                 | --                                 | 232 (26.4)                         | 155 (17.7)   |

**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=34).

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

<sup>†</sup>CPC missing for 4 patients.