

**AWARD NUMBER:** W81XWH-17-2-0010

**TITLE:** Multi-institutional Multidisciplinary Injury Mortality Investigation in the Civilian Pre-Hospital Environment (MIMIC)

**PRINCIPAL INVESTIGATOR:** Dr. Brian Eastridge

**RECIPIENT:**

National Trauma Institute  
San Antonio, TX 78230

**REPORT DATE:** April 2018

**TYPE OF REPORT:** Annual

**PREPARED FOR:** U.S. Army Medical Research and Materiel Command  
Fort Detrick, Maryland 21702-5012

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# REPORT DOCUMENTATION PAGE

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<b>1. REPORT DATE</b> April 2018			<b>2. REPORT TYPE</b> Annual			<b>3. DATES COVERED</b> 20 Mar 2017 - 19 Mar 2018		
<b>4. TITLE AND SUBTITLE</b>  Multi-institutional Multidisciplinary Injury Mortality Investigation in the Civilian Pre-Hospital Environment (MIMIC)						<b>5a. CONTRACT NUMBER</b>		
						<b>5b. GRANT NUMBER</b> W81XWH-17-2-0010		
						<b>5c. PROGRAM ELEMENT NUMBER</b>		
<b>6. AUTHOR(S)</b>  Brian Eastridge, MD  E-Mail: eastridge@uthscsa.edu						<b>5d. PROJECT NUMBER</b>		
						<b>5e. TASK NUMBER</b>		
						<b>5f. WORK UNIT NUMBER</b>		
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> National Trauma Institute 9901 IH 10, Suite 730 San Antonio, TX 78230-2258						<b>8. PERFORMING ORGANIZATION REPORT</b>		
<b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012						<b>10. SPONSOR/MONITOR'S ACRONYM(S)</b>		
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<b>12. DISTRIBUTION / AVAILABILITY STATEMENT</b> Approved for Public Release; Distribution Unlimited								
<b>13. SUPPLEMENTARY NOTES</b>								
<b>14. ABSTRACT</b> The purpose of this project is to focus efforts on a comprehensive review of 3,000 civilian prehospital injury deaths. A multidisciplinary study group will apply the framework and methodology that was developed to identify causes and mechanisms of death and estimate potential survivability. The study will describe the epidemiology of pre-hospital mortality in the context of trauma system development and estimate impact on society. The results will assist in the development of a blueprint for a sustained effort at public health injury mitigation strategies in the pre-hospital environment, identifying high priority areas for injury prevention, trauma systems performance improvement, and opportunities for advancements in research and development.								
<b>15. SUBJECT TERMS</b>  None provided								
<b>16. SECURITY CLASSIFICATION OF:</b>				<b>17. LIMITATION OF ABSTRACT</b>	<b>18. NUMBER OF PAGES</b>	<b>19a. NAME OF RESPONSIBLE PERSON</b> USAMRMC		
<b>a. REPORT</b>  Unclassified	<b>b. ABSTRACT</b>  Unclassified	<b>c. THIS PAGE</b>  Unclassified	<b>19b. TELEPHONE NUMBER</b> <i>(include area code)</i>					

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**INTRODUCTION:** Narrative that briefly (one paragraph) describes the subject, purpose and scope of the research.

Advances in care in both trauma centers and trauma systems have substantially reduced death and disability associated with injury. However, there remains a substantial opportunity to further reduce deaths in the pre-hospital setting. Potential liabilities in civilian and military pre-hospital care must be identified and remediated in order to reduce the number of potentially preventable deaths on the battlefield and in the civilian environment. The purpose of this proposal is to develop a coordinated, multidisciplinary, multi-institutional effort within the civilian clinical sector to identify and characterize the causes of mortality from trauma in the pre-hospital setting and to identify potential high yield areas for research and development in pre-hospital medical care, injury prevention, and trauma systems. This effort will conduct a review of 3,000 pre-hospital deaths in six areas of the country to develop a more comprehensive understanding of the epidemiology of pre-hospital deaths and their potential survivability with the ultimate goal of identifying liabilities in our current trauma system and improving survival of both civilian and military casualties.

**1. KEYWORDS:** Provide a brief list of keywords (limit to 20 words).

Prehospital deaths, survivability, preventable deaths, trauma systems, system improvements

**2. ACCOMPLISHMENTS:** The PI is reminded that the recipient organization is required to obtain prior written approval from the awarding agency grants official whenever there are significant changes in the project or its direction.

**What were the major goals of the project?**

*List the major goals of the project as stated in the approved SOW. If the application listed milestones/target dates for important activities or phases of the project, identify these dates and show actual completion dates or the percentage of completion.*

<b>Objective #1:</b> Develop a framework and methodology for evaluating (i) the causes and pathophysiologic mechanisms of pre-hospital deaths; (ii) the appropriateness of EMS response and care delivered; and (iii) the potential for survivability under both optimal clinical circumstances and within the context of the actual pre-hospital environment.			
<b>Major Task 1: Adapt Protocol for Submission and Determination</b>	Months	Completion Date	% Complete
Subtask 1: Prepare Regulatory Documents and Research Protocol for Study	1-3	1/25/2018	100%
Coordinate with Sites for IRB protocol determination as NHR	1-3	2/7/2018	100%
Coordinate with Sites for Military 2nd level IRB review (ORP/HRPO)	1-6	N/A	N/A
Submit amendments, and protocol deviations as needed	As Needed		N/A

<i>Milestone Achieved: Local IRB determination at UTHSCSA</i>	3	01/31/2018	100%
<i>Milestone Achieved: HRPO acknowledgement for all protocols and local IRB determination as NHR through Sites</i>	6	12/28/2016	100%
<b>Major Task 2: Development of the review criteria</b>	Months	Completion Date	% Complete
Subtask1: Develop consensus regarding definitions and rules	1-3	09/13/2017	100%
Subtask 2: Delivery of review criteria, definitions, and procedures to the government for recommendations and approval.	4	09/18/2017	100%
<i>Milestone Achieved: Government recommendations and approval of review criteria, definitions, and procedures</i>	4	10/11/2017	100%
<b>Objective #2:</b> Organize and standardize a multidisciplinary, multi-institutional network of experts who will apply the methodology described above to identify the causes of pre-hospital deaths due to trauma and estimate the potential for survivability. Study Group members will be trained to ensure standardization of assessments within and across panels.			
<b>Major Task 1: Provide training to Study Group members</b>	Months	Completion Date	% Complete
Subtask 1: Hold series of meetings by teleconference	3		0%
<i>Milestone Achieved: Completed Study Group training</i>	3		0%
<b>Objective #3:</b> Using the methodology and network of experts described above, define the causes and pathophysiologic mechanisms of 3,000 pre-hospital deaths occurring in 6 regions of the country, and estimate the potential for survivability by mechanism of injury (e.g. blunt versus penetrating), geographic location of the injury (urban, suburban, rural, wilderness), the maturity of the local trauma system, and age of the decedent.			
<b>Major Task 1: Abstract data for all cases and enter into REDCap</b>	Months	Completion Date	% Complete
Subtask 1: Perform AIS Coding	2-24		
<b>Major Task 2: Perform mortality reviews at each ME site</b>	Months	Completion Date	% Complete
Subtask 1: Schedule Study Group Teams and visits per ME site	4-30		0%
<i>Milestone Achieved: All panel reviews completed and data submitted</i>	33		0%
<b>Objective #4:</b> Describe the epidemiology of pre-hospital mortality in the context of trauma system development and estimate its impact on society. The societal impact of pre-hospital deaths will be measured in terms years of potential life lost and lost productivity. Most important, estimates of potential cost savings will be derived based on the analysis of potential survivability.			
<b>Major Task 1: Data Analysis</b>	Months	Completion Date	% Complete
Subtask 1: Coordinate with Sites & Data Core for monitoring data collection and data quality	4-36		0%
Subtask 2: Perform all analyses according to specifications, share output and finding with all investigators	6-39		0%
<i>Milestone Achieved: Report results from data analysis</i>			0%
<b>Objective #5:</b> Develop a blueprint for a sustained effort at public health injury mitigation strategies in the pre-hospital environment, identifying high priority areas for injury prevention, trauma systems performance			

improvement as well as opportunities for advancements in research and development.			
<b>Major Task 1: Steering Committee analysis and results dissemination planning</b>	Months	Completion Date	% Complete
Subtask 1: Work with data core and dissemination of findings (abstracts, presentation, publications, DOD, blueprint)	36-42		0%
<i>Milestone Achieved: Dissemination materials produced</i>	42		0%

**What was accomplished under these goals?**

*For this reporting period describe: 1) major activities; 2) specific objectives; 3) significant results or key outcomes, including major findings, developments, or conclusions (both positive and negative); and/or 4) other achievements. Include a discussion of stated goals not met. Description shall include pertinent data and graphs in sufficient detail to explain any significant results achieved. A succinct description of the methodology used shall be provided. As the project progresses to completion, the emphasis in reporting in this section should shift from reporting activities to reporting accomplishments.*

**Obj. 1: Develop a framework and methodology for evaluation**

**Major Task 1: Adapt protocol for submission and determination**

**Accomplishments:**

- Dr. Eastridge amended the protocol to include obtaining prehospital data from the National Emergency Medical Service Information System (NEMSIS)
- The protocol was approved by the UTHSCSA IRB as non-human research/ exempt.
- All six Medical Examiner sites and Johns Hopkins University were able to use the Non-human research determination of the University of Texas Health San Antonio

**Major Task 2: Development of the review criteria**

**Subtask 1: Develop consensus regarding definitions and rules**

- MIMIC Investigators (Dr. Brian Eastridge, Dr. Kurt Nolte, and Dr. Ellen Mackenzie) meet regularly to plan/operationalize the study
- MIMIC Steering Committee met June 12-13, 2017 with the following goals: Develop a lexicon that is appropriate for the military and civilian environment.
  - Define data elements for inclusion
  - Give feedback on review process
- Draft CRF to be used to abstract data in REDCap has been developed (sample attached)
- Dr. Eastridge met with the Neurosurgical and Orthopedic representatives to discuss the definitions, criteria, and study process that were derived at the Steering Committee. The Neurosurgical and Orthopedic partners were unable to attend the meeting.
- The study definitions, criteria, rules, and study process were finalized, sent to the DOD and approved.
- Study team has been meeting with NHTSA to discuss data linkages with automated crash data, Onstar, BMW, as well as Fatality Analysis Reporting System (FARS)

- Study team met with Dr. Mann of National Emergency Medical Service Information System (NEMSIS) to establish a process for retrieving subject level data and EMS base station location information. Dr. Mann provided the team with contact information for the state data managers and we have engaged each state data manager to work with us directly on this project.
- Death data has been received from all six states to be used for subject selection.
- GIS software was purchased from ESRI to begin working on time/distance study associated factors.

***Obj. 2: Organize and standardize a multidisciplinary, multi-institutional network of experts who will apply the methodology***

***Major Task 1: Provide training to Study Group members***

- MIMIC Investigator group determined that an online review process led by JHU – a “Profiler” (electronic data abstract presentation / reviewer recording tool) will work well for the death reviews, allow more reviewers at less cost and travel

***Other Achievements:***

- Lizette Villarreal was hired on September 17, 2017 to provide program management to the project.
- Nick Medrano, a GIS Analyst was hired with a start date of April 9, 2018 to begin working on the location/ geographic coding of trauma centers, death locations, and EMS air and ground locations. This analyst will assist the project team in determining time and distance factors for each death case.

*If the project was not intended to provide training and professional development opportunities or there is nothing significant to report during this reporting period, state “Nothing to Report.”*

*Describe opportunities for training and professional development provided to anyone who worked on the project or anyone who was involved in the activities supported by the project. “Training” activities are those in which individuals with advanced professional skills and experience assist others in attaining greater proficiency. Training activities may include, for example, courses or one-on-one work with a mentor. “Professional development” activities result in increased knowledge or skill in one’s area of expertise and may include workshops, conferences, seminars, study groups, and individual study. Include participation in conferences, workshops, and seminars not listed under major activities.*

1. Dr. Brian Eastridge presented at the National Association of Medical Examiners (NAME) Conference. Presentation entitled “Trauma Surgeon and the Forensic Pathologist.” Oct-2017
2. Dr. Brian Eastridge presented at the Southwest Texas Regional Advisory Council for Trauma (STRAC). Presentation entitled “Injury Mortality Surveillance System: Rationale and Development of Preventable Death Analysis in Civilian Environment.” Nov-2017

**How were the results disseminated to communities of interest?**

*If there is nothing significant to report during this reporting period, state “Nothing to Report.”*

*Describe how the results were disseminated to communities of interest. Include any outreach activities that were undertaken to reach members of communities who are not usually aware of these project activities, for the purpose of enhancing public understanding and increasing interest in learning and careers in science, technology, and the humanities.*

Nothing to Report

**What do you plan to do during the next reporting period to accomplish the goals?**

*If this is the final report, state “Nothing to Report.” Describe briefly what you plan to do during the next reporting period to accomplish the goals and objectives.*

- Training materials will be finalized and piloted by the Steering Committee initially followed by reviewer training [Obj 2: MT 1]
- AIS coding will commence with training cases and review cases [Obj 3: MT1]
- Complete data dictionary, CRF, REDCap programming, and Profiler [Obj 4: MT 1]
- Develop training manuals and begin activities related to preparation for training and data collection at the ME sites [Obj 4: MT1]
- Execute agreements with all ME sites
- Geographic coding for the State of New Mexico will be completed.

**4. IMPACT:** Describe distinctive contributions, major accomplishments, innovations, successes, or any change in practice or behavior that has come about as a result of the project relative to:

**What was the impact on the development of the principal discipline(s) of the project?**

*If there is nothing significant to report during this reporting period, state “Nothing to Report.”*

*Describe how findings, results, techniques that were developed or extended, or other products from the project made an impact or are likely to make an impact on the base of knowledge, theory, and research in the principal disciplinary field(s) of the project. Summarize using language that an intelligent lay audience can understand (Scientific American style).*

Nothing to Report

**What was the impact on other disciplines?**

*If there is nothing significant to report during this reporting period, state “Nothing to Report.”*

*Describe how the findings, results, or techniques that were developed or improved, or other products from the project made an impact or are likely to make an impact on other disciplines.*

Nothing to Report

**What was the impact on technology transfer?**

*If there is nothing significant to report during this reporting period, state “Nothing to Report.”*

Nothing to Report

**What was the impact on society beyond science and technology?**

*If there is nothing significant to report during this reporting period, state “Nothing to Report.”*

*Describe how results from the project made an impact, or are likely to make an impact, beyond the bounds of science, engineering, and the academic world on areas such as:*

- *improving public knowledge, attitudes, skills, and abilities;*
- *changing behavior, practices, decision making, policies (including regulatory policies), or social actions; or*
- *improving social, economic, civic, or environmental conditions.*

Nothing to Report

5. **CHANGES/PROBLEMS:** The PD/PI is reminded that the recipient organization is required to obtain prior written approval from the awarding agency grants official whenever there are significant changes in the project or its direction. If not previously reported in writing, provide the following additional information or state, “Nothing to Report,” if applicable:

At the onset of the study, the team was planning to conduct all case reviews in person using designated teams traveling to various ME locations to review a set of death cases. Dr. Eastridge and the study team have been working with Dr. Ellen Mackenzie to utilize “Profiler,” an online review system. All reviews will be conducted by the review teams utilizing Profiler. This system will allow reviewers to review cases online, concurrently, and the review adjudication team will only travel to a location when consensus is not reached after the initial review and a secondary, moderated review. Although the development of the system has delayed the reviews from beginning, once the system is finalized, we anticipate that the study will quickly move at a steady pace.

**Changes that had a significant impact on expenditures**

*Describe changes during the reporting period that may have had a significant impact on expenditures, for example, delays in hiring staff or favorable developments that enable meeting objectives at less cost than anticipated.*

Nothing to Report

**Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents**

**Significant changes in use or care of human subjects**

Not applicable

**Significant changes in use or care of vertebrate animals**

Not applicable

**Significant changes in use of biohazards and/or select agents**

Not Applicable

**6. PRODUCTS:** List any products resulting from the project during the reporting period. If there is nothing to report under a particular item, state “Nothing to Report.”

- **Publications, conference papers, and presentations**

Report only the major publication(s) resulting from the work under this award.

- Dr. Brian Eastridge presented at the National Association of Medical Examiners (NAME) Conference. Presentation entitled “Trauma Surgeon and the Forensic Pathologist.” Oct-2017
- Dr. Brian Eastridge presented at the Southwest Texas Regional Advisory Council for Trauma (STRAC). Presentation entitled “Injury Mortality Surveillance System: Rationale and Development of Preventable Death Analysis in Civilian Environment.” Nov-2017

**Journal publications.** *List peer-reviewed articles or papers appearing in scientific, technical, or professional journals. Identify for each publication: Author(s); title; journal; volume; year; page numbers; status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).*

Nothing to report

**Books or other non-periodical, one-time publications.** *Report any book, monograph, dissertation, abstract, or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like. Identify for each one-time publication: author(s); title; editor; title of collection, if applicable; bibliographic information; year; type of publication (e.g., book, thesis or dissertation); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).*

Nothing to report

**Other publications, conference papers and presentations.** *Identify any other publications, conference papers and/or presentations not reported above. Specify the status of the publication as noted above. List presentations made during the last year (international, national, local societies, military meetings, etc.). Use an asterisk (\*) if presentation produced a manuscript.*

Nothing to Report

- **Website(s) or other Internet site(s)**

*List the URL for any Internet site(s) that disseminates the results of the research activities. A short description of each site should be provided. It is not necessary to include the publications already specified above in this section.*

Nothing to Report

- **Technologies or techniques**

*Identify technologies or techniques that resulted from the research activities. Describe the technologies or techniques were shared.*

Nothing to Report

- **Inventions, patent applications, and/or licenses**

*Identify inventions, patent applications with date, and/or licenses that have resulted from the research. Submission of this information as part of an interim research performance progress report is not a substitute for any other invention reporting required under the terms and conditions of an award.*

Nothing to Report

- **Other Products**

*Identify any other reportable outcomes that were developed under this project. Reportable outcomes are defined as a research result that is or relates to a product, scientific advance, or research tool that makes a meaningful contribution toward the understanding, prevention, diagnosis, prognosis, treatment and /or rehabilitation of a disease, injury or condition, or to improve the quality of life. Examples include:*

Nothing to Report

**7. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS**

**What individuals have worked on the project?**

*Provide the following information for: (1) PDs/PIs; and (2) each person who has worked at least one person month per year on the project during the reporting period, regardless of the source of compensation (a person month equals approximately 160 hours of effort). If information is unchanged from a previous submission, provide the name only and indicate “no change”.*

<b>Personnel</b>	<b>Role</b>	<b>Percent Effort</b>
Brian Eastridge	PI	20%
Amy Flores	Controller	20% Mar-Dec 2017 25% Jan-Mar 2018
Lizette Villarreal	Program Manager	20% Mar-Dec 2017 60% Jan-Mar 2018
Monica Phillips	Research Operations Director	60% Mar-Dec 2017 50% Jan-Mar 2018
Michelle Price	Research Director	20%
Sharon Smith	Project Administrator	10% Mar-Dec 2017 20% Jan-Mar 2018
<b><i>New Mexico Subaward</i></b>	<b><i>Role</i></b>	<b><i>Percent Effort</i></b>
Kurt B. Nolte	PI/Co-I	15%
Joseph Hunt	Forensic Radiologist	3.51%
Sarah Lathrop	Epidemiologist	11%
Garon Bodor	Research Coordinator	40%
<b><i>Johns Hopkins University subaward</i></b>	<b><i>Role</i></b>	<b><i>Percent Effort</i></b>
Ellen Mackenzie	PI/Co-I	15%
Kevin Quach	Project Director	25%
Datla Raju	Data Analyst	10%

**Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?**

*If there is nothing significant to report during this reporting period, state “Nothing to Report.”*

*If the active support has changed for the PD/PI(s) or senior/key personnel, then describe what the change has been. Changes may occur, for example, if a previously active grant has closed and/or if a previously pending grant is now active. Annotate this information so it is clear what has changed from the previous submission. Submission of other support information is not necessary for pending changes or for changes in the level of effort for active support reported previously. The awarding agency may require prior written approval if a change in active other support significantly impacts the effort on the project that is the subject of the project report.*

Nothing to Report

**What other organizations were involved as partners?**

*If there is nothing significant to report during this reporting period, state “Nothing to Report.”*

*Describe partner organizations – academic institutions, other nonprofits, industrial or commercial firms, state or local governments, schools or school systems, or other organizations (foreign or domestic) – that were involved with the project. Partner organizations may have provided financial or in-kind support, supplied facilities or equipment, collaborated in the research, exchanged personnel, or otherwise contributed.*

*Provide the following information for each partnership:*

*Organization Name:*

*Location of Organization: (if foreign location list country)*

*Partner’s contribution to the project (identify one or more)*

- *Financial support;*
- *In-kind support (e.g., partner makes software, computers, equipment, etc., available to project staff);*
- *Facilities (e.g., project staff use the partner’s facilities for project activities);*
- *Collaboration (e.g., partner’s staff work with project staff on the project);*
- *Personnel exchanges (e.g., project staff and/or partner’s staff use each other’s facilities, work at each other’s site); and*
- *Other.*

The six states below have contributed death data to the project for the total review of 3,000 prehospital death cases.

<b>Organization Name</b>	<b>Location of Organization</b>	<b>Contribution to the Project</b>
Oklahoma Office of the Medical Examiner	901 North Stonewall Oklahoma City, OK 73117	Death data
Washington DC Office of the Medical Examiner	401 E. Street SW Washington, DC 20024	Death data
Maryland Office of the Medical Examiner	900 W. Baltimore Street Baltimore, MD 21223	Death data
New Mexico Office of the Medical Examiner	1101 Camino de Salud NE Albuquerque, NM 87102	Death data
Iowa Office of the Medical Examiner	5244C Roy Carver Pavilion Iowa City, IA 52242	Death data
Connecticut Office of the Medical Examiner	11 Shuttle Road Farmington, CT 06032	Death data

## 8. SPECIAL REPORTING REQUIREMENTS

**COLLABORATIVE AWARDS:** For collaborative awards, independent reports are required from BOTH the Initiating Principal Investigator (PI) and the Collaborating/Partnering PI. A duplicative report is acceptable; however, tasks shall be clearly marked with the responsible PI and research site. A report shall be submitted to <https://ers.amedd.army.mil> for each unique award.

**QUAD CHARTS:** If applicable, the Quad Chart (available on <https://www.usamraa.army.mil>) should be updated and submitted with attachments.

Quad Chart Attached

**9. APPENDICES:** Attach all appendices that contain information that supplements, clarifies or supports the text. Examples include original copies of journal articles, reprints of manuscripts and abstracts, a curriculum vitae, patent applications, study questionnaires, and surveys, etc.

- UTHSA IRB Determination
- Draft Case Report Form

# Multiinstitutional Multidisciplinary Injury Mortality Investigation in the Civilian Pre-Hospital Environment (MIMIC)

BA150629

W81XWH-17-2-0010



PI: Brian Eastridge

Org: National Trauma Institute

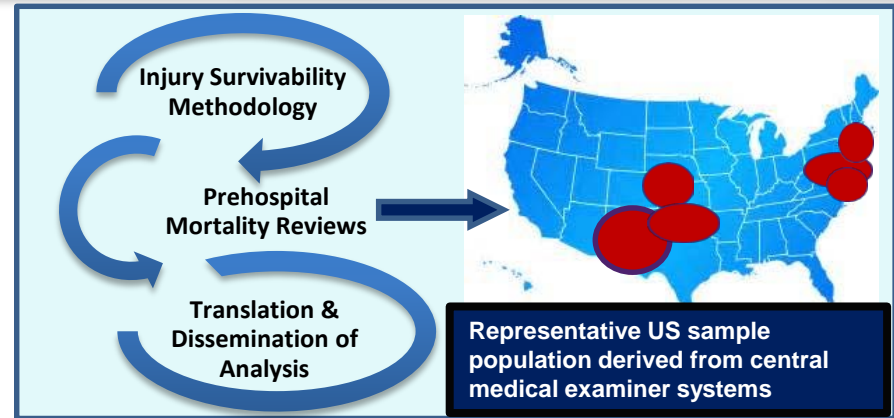
Award Amount: \$3,979,380

## Study/Product Aim(s)

- Develop a framework and methodology for evaluating (i) the causes and pathophysiologic mechanisms of pre-hospital deaths; (ii) the appropriateness of EMS response and care delivered; and (iii) the potential for survivability under both optimal clinical circumstances and within the context of each individual injury event.
- Develop a blueprint for a sustained effort at public health injury mitigation strategies including injury prevention, trauma systems, and acute care.

## Approach

The framework and methodology will be established by a multi-institutional network of experts who will apply the methodology in review and analysis of 3,000 pre-hospital death cases at six Medical Examiner sites including those serving urban, rural, and frontier environments.



Accomplishment: Data has been submitted for all six states involved in the project to finalize subject selection

## Timeline and Cost

Activities	CY	17	18	19	20
Adapt Protocol for Submission; Develop review criteria		█	█		
Provide training to reviewers; Abstract data			█	█	
Perform mortality reviews; Data analysis				█	█
Analysis and results dissemination					█
<b>Estimated Budget (\$K)</b>		<b>\$1,026</b>	<b>\$1,198</b>	<b>\$1,225</b>	<b>\$546</b>

## Goals/Milestones

**CY17 Goal** – Methodology determined, reviewers trained, data abstraction and reviews begin

Protocol submitted; methodology determined

**CY18 Goals** – Virtual Reviews commence

Data abstraction

Reviews in progress

**CY19 Goal** – Virtual Reviews continue

Data abstraction

Reviews in progress

**CY20 Goal** – Data analysis, result dissemination

Report results from data analysis

Dissemination materials produced

## Comments/Challenges/Issues/Concerns

- Online review systems being finalized

## Budget Expenditure to Date

Projected Expenditure: \$1,032,318

Actual Expenditure: \$796,406 (as of 03-31-18)

Updated: (11 April 2018)

# CRF00

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MIMIC ID number

(Prepopulated)

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ME Case ID number

(Prepopulated)

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Region

(Prepopulated)

- D.C.
- Maryland
- New Mexico
- Iowa
- Oklahoma
- Connecticut

---

Place of death

- At scene
- In transport (including DoA)

---

Information available to review (select all that apply)

- CT Scan
- Death Certificate
- EMS Dispatch Report
- EMS Run Report
- Hospital Record
- Medical Examiner Report
- Police Report
- Traffic Investigation Report
- Other

---

Upload CT Scan

---

Upload Death Certificate

---

Upload EMS Dispatch Report

---

Upload EMS Run Report

---

Upload Hospital Record

---

Upload Medical Examiner Report

---

Specify type of forensic exam

- External only
- Partial
- Full

---

Upload Police Report

---

Upload Traffic Investigation Report

---

Specify Other Report

---

---

Upload Other Report

---

Notes:

---

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**Form Statistics**

Form submitted by

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Form submitted timestamp

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Form last modified by

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Form last modified timestamp

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Form first completed timestamp

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# Patient Demographics

Date Form Completed  
(from CRF cover sheet)

\_\_\_\_\_  
(Use date control OR enter date in YYYY-MM-DD  
format (hyphens only, no slashes))

1. Sex

- Female  
 Male

2. Date of birth

\_\_\_\_\_  
(Use date control OR enter date in YYYY-MM-DD  
format (hyphens only, no slashes))

3. Age at time of death

- Years  
 Days

Years

\_\_\_\_\_  
((years))

Days

\_\_\_\_\_  
((days))

4. Is the deceased of Latino or Hispanic origin?

- Yes  
 No  
 Don't Know

5. What race is the deceased? Please choose one or  
more of the following:

- a. White  
 b. African American  
 c. Asian  
 d. American Indian or Alaskan Native  
 e. Native Hawaiian or other Pacific Islander  
 f. Other  
 g. Don't know

Specify other

\_\_\_\_\_

6. Height (cm)

\_\_\_\_\_

7. Weight (kg)

\_\_\_\_\_

8. BMI (Calculated)

\_\_\_\_\_

The calculated BMI indicates an error in height or weight. Please check the numbers provided for questions 6 and 7.

9. Please indicate the patient's personal medical history of the following conditions:

None

- No Comorbidities

Select all that apply.

- Advanced Directive Limiting Care
- Alcohol use disorder
- Angina Pectoris
- Anticoagulant Therapy
- Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)
- Bleeding Disorder
- Cerebrovascular Accident (CVA)
- Chronic Obstructive Pulmonary Disease (COPD)
- Chronic Renal Failure
- Cirrhosis
- Congenital Anomalies
- Congestive Heart Failure
- Currently Receiving Chemotherapy for Cancer
- Current Smoker
- Dementia
- Diabetes Mellitus
- Disseminated Cancer
- Functionally Dependent Health Status
- Hypertension
- Mental/Personality Disorder
- Myocardial Infarction (MI)
- Peripheral Arterial Disease (PAD)
- Prematurity
- Steroid Use
- Substance Abuse Disorder
- Other History #1
- Other History #2
- Other History #3

(specify other #1):

\_\_\_\_\_

(specify other #2):

\_\_\_\_\_

(specify other #3):

\_\_\_\_\_

Notes:

\_\_\_\_\_

This Notes Field Is For MCC Use Only.

\_\_\_\_\_

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# Injury Cause and Circumstances

---

Date Form Completed  
(from CRF cover sheet)

\_\_\_\_\_  
(Use date control OR enter date in YYYY-MM-DD  
format (hyphens only, no slashes))

---

1. Date of Injury (YYYY-MM-DD)

\_\_\_\_\_  
(Use date control OR enter date in YYYY-MM-DD  
format (hyphens only, no slashes))

---

2. Time of Injury (military time)

\_\_\_\_\_  
(Type in time (HH:MM) or use time control above)

---

3. Location of Injury

---

Street Number

\_\_\_\_\_

---

Street Name

\_\_\_\_\_

---

City

\_\_\_\_\_

State

- AZ - Arizona
- AR - Arkansas
- CO - Colorado
- CT - Connecticut
- DE - Delaware
- IL - Illinois
- IA - Iowa
- KS - Kansas
- LA - Louisiana
- ME - Maine
- MD - Maryland
- MA - Massachusetts
- MN - Minnesota
- MO - Missouri
- NE - Nebraska
- NH - New Hampshire
- NJ - New Jersey
- NM - New Mexico
- NY - New York
- OK - Oklahoma
- PA - Pennsylvania
- RI - Rhode Island
- SD - South Dakota
- TX - Texas
- UT - Utah
- VT - Vermont
- VA - Virginia
- WV - West Virginia
- WI - Wisconsin
- Washington D.C.
- Mexico

Zipcode

\_\_\_\_\_

4. Other description of location of injury

\_\_\_\_\_

5. Latitude of Injury (GPS coordinates)

\_\_\_\_\_

6. Longitude of Injury (GPS coordinates)

\_\_\_\_\_

7. Is the location of injury the same as the location of the decedent?

- Yes
- No

**Note: If different locations, q8-11 will trigger to input location of decedent**

8. Location of Decedent

Street Number

\_\_\_\_\_

Street Name

\_\_\_\_\_

City

\_\_\_\_\_

---

State	<input type="radio"/> AZ - Arizona <input type="radio"/> AR - Arkansas <input type="radio"/> CO - Colorado <input type="radio"/> CT - Connecticut <input type="radio"/> DE - Delaware <input type="radio"/> IL - Illinois <input type="radio"/> IA - Iowa <input type="radio"/> KS - Kansas <input type="radio"/> LA - Louisiana <input type="radio"/> ME - Maine <input type="radio"/> MD - Maryland <input type="radio"/> MA - Massachusetts <input type="radio"/> MN - Minnesota <input type="radio"/> MO - Missouri <input type="radio"/> NE - Nebraska <input type="radio"/> NH - New Hampshire <input type="radio"/> NJ - New Jersey <input type="radio"/> NM - New Mexico <input type="radio"/> NY - New York <input type="radio"/> OK - Oklahoma <input type="radio"/> PA - Pennsylvania <input type="radio"/> RI - Rhode Island <input type="radio"/> SD - South Dakota <input type="radio"/> TX - Texas <input type="radio"/> UT - Utah <input type="radio"/> VT - Vermont <input type="radio"/> VA - Virginia <input type="radio"/> WV - West Virginia <input type="radio"/> WI - Wisconsin <input type="radio"/> Washington D.C. <input type="radio"/> Mexico
-------	---

---

Zipcode	_____
---------	-------

---

9. Other description of location of decedent	_____
--	-------

---

10. Latitude of Decedent (GPS coordinates)	_____
--	-------

---

11. Longitude of Decedent (GPS coordinates)	_____
---	-------

---

12. Rurality	<input type="radio"/> Rural <input type="radio"/> Urban Cluster <input type="radio"/> Urban Area
--------------	--

---

13. Injury Type (select all that apply)	<input type="checkbox"/> Penetrating <input type="checkbox"/> Blunt <input type="checkbox"/> Explosive <input type="checkbox"/> Thermal (including electrocution) <input type="checkbox"/> Unknown
---	--

14. Agent of Wounding (select all that apply)

- Ballistic, High Velocity (e.g. rifle)
- Ballistic, Low Velocity (e.g. handgun)
- Ballistic, Shotgun
- Explosion
- Fall from Level Ground
- Fall from height
- Motor Vehicle , Passenger
- Motor Vehicle , Driver
- Motor Vehicle , Pedestrian
- Motor Vehicle , Cyclist
- Motorcycle
- Bicycle
- All-terrain vehicle crash
- Aircraft - helicopter
- Aircraft - fixed wing
- Train
- Cut, pierce or stab
- Struck by or against
- Machinery/Equipment agricultural related
- Machinery/Equipment non-agricultural related
- Explosion
- Electrical
- Animal
- Sports Related
- Traumatic Asphyxia
- Other
- Unknown

Specify other agent

---

If fall, Specify Height (ft)

---

If motor vehicle, vehicle type

- Car (sedan/coupe)
- SUV
- Light truck
- Heavy truck
- Commercial truck
- Motorcycle

---

If motor vehicle, vehicle manufacturer

- Acura
- Alfa Romeo
- Aston Martin
- Audi
- Bentley
- BMW
- Buick
- Cadillac
- Chevrolet
- Chrysler
- Dodge
- Ferrari
- Fiat
- Ford
- Freightliner
- Genesis
- GMC
- Honda
- Hyundai
- Infiniti
- Jaguar
- Jeep
- Kia
- Lamborghini
- Land Rover
- Lexus
- Lincoln
- Lotus
- Maserati
- Mazda
- McLaren
- Mercedes-Benz
- Mini
- Mitsubishi
- Nissan
- Porsche
- Ram
- Rolls-Royce
- smart
- Subaru
- Tesla
- Toyota
- Volkswagen
- Volvo
- Other

---

Specify other vehicle manufacturer

\_\_\_\_\_

---

If motor vehicle, vehicle model

\_\_\_\_\_

---

If motor vehicle, vehicle year

\_\_\_\_\_

---

If cut, pierced or stabbed, specify object

- Axe
- Can-opener
- Chisel
- Dagger
- Edge of stiff paper
- Fork
- Garden tool
- Glass
- Handsaw
- Hoe
- Ice-pick
- Knife - hunting
- Knife - kitchen
- Knife - utility
- Knife - other
- Machete
- Nail
- Needle
- Papercutter
- Pitchfork
- Rake
- Scissors
- Screwdriver
- Sewing machine
- Shovel
- Sword
- Tin can lid
- Other

---

Specify other knife

\_\_\_\_\_

---

Specify other object (stab)

\_\_\_\_\_

---

If struck, specify how

- Struck against object
- Struck against stationary object
- Struck by moving object (including falling object)
- Stepped on object
- Other
- Unknown

---

If struck, specify object

\_\_\_\_\_

---

If explosive, specify explosive device

\_\_\_\_\_

---

If electrical, specify electrical source

\_\_\_\_\_

---

If animal, what type?

- Alligator
- Bear
- Canid
- Cow
- Felid
- Horse
- Insect - bee, wasp or hornet
- Insect - non-venomous arthropod
- Insect - other
- Shark
- Spider
- Venomous snake or lizard
- Other

---

Specify canid

- Coyote
- Dingo
- Dog
- Wolf

---

Specify felid

- Cheetah
- Cougar
- House cat
- Jaguar
- Leopard
- Lion
- Tiger

---

Specify other insect

\_\_\_\_\_

---

Specify other animal

\_\_\_\_\_

---

If sports, what sports?

\_\_\_\_\_

---

15. Intent/manner of Injury

- Suicide
- Homicide
- Unintentional/accident
- Undetermined
- Unknown

---

16. Place of Injury

- Street
- Highway
- Home
- School
- Work
- Park
- Playground
- Nursing Home/Long-term care facility
- Other
- Unknown

---

Specify other

---

17. Weather Conditions (select all that apply)

- Clear skies
- Rain
- Rain and thunderstorm
- Snow or ice
- High winds
- Unknown

18. Presence of Protective Equipment

- Yes
- No

19. Specify protective equipment present (select all that apply)

- Helmet
- Lap Belt
- Shoulder Belt
- Child Restraint
- Personal Floatation Device
- Eye Protection
- Protective Clothing
- Airbag
- Other
- Unknown

---

Specify other

---

20. Was the airbag deployed?

- Yes
- No
- Unknown

21. Work-related

- Yes
- No
- Unknown

22. Mass Casualty Incident (defined as 5 or more people)

- Yes
- No
- Unknown

23. Other Scene Danger

---

24. Blood Alcohol Level (0.XX%)

---

25. Toxicology Screen (select all that apply)

- Heroin
- Cocaine
- Fentanyl
- Methamphetamine
- LSD
- Ecstasy
- Ketamine
- Other 1
- Other 2
- Other 3
- Unknown

---

Specify other #1

---

---

Specify other #2

---

---

Specify other #3

---

---

26. Describe the injury in detail. Include the mechanism and manner of injury, circumstances surrounding the injury (e.g. protective equipment used, weather conditions, extraction required)

---

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# Nature and Severity of Injuries

Note: Option available to add another injury to each of these major body regions, if required, in the electronic form

## Head or Neck

Injury Description

---

Primary source of information

- Autopsy
- CT Scan
- ME Record
- EMS Record
- Hospital Record

AIS Predot (enter 6-digit descriptor)

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
- 2
- 3
- 4
- 5
- 6
- 9

Military AIS Score

---

## Face

Injury Description

---

Primary source of information

- Autopsy
- CT Scan
- ME Record
- EMS Record
- Hospital Record

AIS Predot (enter 6-digit descriptor)

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
- 2
- 3
- 4
- 5
- 6
- 9

Military AIS Score

---

## Thorax

---

Injury Description

---

---

Primary source of information

- Autopsy
  - CT Scan
  - ME Record
  - EMS Record
  - Hospital Record
- 

AIS Predot (enter 6-digit descriptor)

---

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 9
- 

Military AIS Score

---

**Abdomen and Pelvic Contents**

---

Injury Description

---

---

Primary source of information

- Autopsy
  - CT Scan
  - ME Record
  - EMS Record
  - Hospital Record
- 

AIS Predot (enter 6-digit descriptor)

---

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 9
- 

Military AIS Score

---

**Spine and Spinal Cord**

---

Injury Description

---

---

Primary source of information

- Autopsy
- CT Scan
- ME Record
- EMS Record
- Hospital Record

---

AIS Predot (enter 6-digit descriptor)

\_\_\_\_\_

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
- 2
- 3
- 4
- 5
- 6
- 9

---

Military AIS Score

\_\_\_\_\_

**Lower Extremities**

---

Injury Description

\_\_\_\_\_

---

Primary source of information

- Autopsy
- CT Scan
- ME Record
- EMS Record
- Hospital Record

---

AIS Predot (enter 6-digit descriptor)

\_\_\_\_\_

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
- 2
- 3
- 4
- 5
- 6
- 9

---

Military AIS Score

\_\_\_\_\_

**Upper Extremities**

---

Injury Description

\_\_\_\_\_

---

Primary source of information

- Autopsy
- CT Scan
- ME Record
- EMS Record
- Hospital Record

---

AIS Predot (enter 6-digit descriptor)

---

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
- 2
- 3
- 4
- 5
- 6
- 9

---

Military AIS Score

---

**Burns**

---

Injury Description

---

---

Primary source of information

- Autopsy
- CT Scan
- ME Record
- EMS Record
- Hospital Record

---

AIS Predot (enter 6-digit descriptor)

---

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
- 2
- 3
- 4
- 5
- 6
- 9

---

Military AIS Score

---

**External and Other**

---

Injury Description

---

---

Primary source of information

- Autopsy
- CT Scan
- ME Record
- EMS Record
- Hospital Record

---

AIS Predot (enter 6-digit descriptor)

---

---

AIS Severity (enter 1-6 or 9 if unknown)

- 1
- 2
- 3
- 4
- 5
- 6
- 9

---

Military AIS Score

---

---

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# First Discovery and Response

---

1. Event Witnessed  Yes  
 No  
 Unknown

---

2. Destination from Scene  Non-trauma center  
 Trauma Center Level 1  
 Trauma Center Level 2  
 Trauma Center Level 3  
 Trauma Center Level 4  
 Mortuary  
 OCME  
 Other

---

Specify other \_\_\_\_\_

---

3. Mode of Transport from Scene  Ground ambulance  
 Fixed wing  
 Rotary wing  
 Law enforcement vehicle  
 Private vehicle  
 Other  
 Unknown

---

Specify other \_\_\_\_\_

---

4. Select responders involved. (select all that apply)  Bystander  
 Police  
 Fire  
 Other

---

**Bystander**

---

Time of Bystander Arrival

\_\_\_\_\_  
(Type in time (HH:MM) or use time control above)

---

Interventions Applied by Bystander  CPR  
 Tourniquet  
 AED  
 Other  
 Unknown

---

Specify tourniquet type

Emergency Medical Tourniquet (EMT)  
 Special Operations Forces Tourniquet (SOF-T)  
 Military Emergency Tourniquet (MET)  
 Combat Application Tourniquet (CAT)  
 Mechanical Advantage Tourniquet (MAT)  
 Ratcheting Medical Tourniquet  
 Other

---

Specify other \_\_\_\_\_

---

Specify other

---

---

Extrication by Bystander

- Yes  
 No  
 Unkown
- 

**Police**

---

Time of Police Arrival

\_\_\_\_\_  
(Type in time (HH:MM) or use time control above)

---

Interventions Applied by Police

- CPR  
 Tourniquet  
 AED  
 Other  
 Unknown
- 

Specify tourniquet type

- Emergency Medical Tourniquet (EMT)  
 Special Operations Forces Tourniquet (SOF-T)  
 Military Emergency Tourniquet (MET)  
 Combat Application Tourniquet (CAT)  
 Mechanical Advantage Tourniquet (MAT)  
 Ratcheting Medical Tourniquet  
 Other
- 

Specify other

---

Specify other

---

Extrication by Police

- Yes  
 No  
 Unkown
- 

**Fire**

---

Time of Fire Arrival

\_\_\_\_\_  
(Type in time (HH:MM) or use time control above)

---

Interventions Applied by Fire

- CPR  
 Tourniquet  
 AED  
 Other  
 Unknown

---

Specify tourniquet type

- Emergency Medical Tourniquet (EMT)
- Special Operations Forces Tourniquet (SOF-T)
- Military Emergency Tourniquet (MET)
- Combat Application Tourniquet (CAT)
- Mechanical Advantage Tourniquet (MAT)
- Ratcheting Medical Tourniquet
- Other

---

Specify other

\_\_\_\_\_

---

Specify other

\_\_\_\_\_

---

Extrication by Fire

- Yes
- No
- Unkown

---

**Other Responder**

---

Specify Other Responder

\_\_\_\_\_

Time of [fdr\_other\_sp501] Arrival

(Type in time (HH:MM) or use time control above)

Interventions Applied by [fdr\_other\_sp501]

- CPR
- Tourniquet
- AED
- Other
- Unknown

Specify tourniquet type

- Emergency Medical Tourniquet (EMT)
- Special Operations Forces Tourniquet (SOF-T)
- Military Emergency Tourniquet (MET)
- Combat Application Tourniquet (CAT)
- Mechanical Advantage Tourniquet (MAT)
- Ratcheting Medical Tourniquet
- Other

Specify other

\_\_\_\_\_

Specify other

\_\_\_\_\_

Extrication by [fdr\_other\_sp501]

- Yes
- No
- Unkown

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# Geographic Access

## GEOGRAPHIC ACCESS TO EMS AND TRAUMA CARE

### Proximity to nearest treatment centers

#### Nearest EMS

Ground Time

\_\_\_\_\_  
((minutes))

Ground Distance

\_\_\_\_\_  
((miles))

Air Time

\_\_\_\_\_  
((minutes))

Air Distance

\_\_\_\_\_  
((miles))

#### Nearest Trauma Center I

Ground Time

\_\_\_\_\_  
((minutes))

Ground Distance

\_\_\_\_\_  
((miles))

Air Time

\_\_\_\_\_  
((minutes))

Air Distance

\_\_\_\_\_  
((miles))

#### Nearest Trauma Center II

Ground Time

\_\_\_\_\_  
((minutes))

Ground Distance

\_\_\_\_\_  
((miles))

---

Air Time

\_\_\_\_\_  
((minutes))

---

Air Distance

\_\_\_\_\_  
((miles))

---

**Nearest Trauma Center III**

---

Ground Time

\_\_\_\_\_  
((minutes))

---

Ground Distance

\_\_\_\_\_  
((miles))

---

Air Time

\_\_\_\_\_  
((minutes))

---

Air Distance

\_\_\_\_\_  
((miles))

---

**Nearest Trauma Center IV**

---

Ground Time

\_\_\_\_\_  
((minutes))

---

Ground Distance

\_\_\_\_\_  
((miles))

---

Air Time

\_\_\_\_\_  
((minutes))

---

Air Distance

\_\_\_\_\_  
((miles))

---

**Nearest Non-trauma Center**

---

Ground Time

\_\_\_\_\_  
((minutes))

---

Ground Distance

\_\_\_\_\_  
((miles))

---

---

Air Time

\_\_\_\_\_  
((minutes))

---

Air Distance

\_\_\_\_\_  
((miles))

---

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# Ems Care

---

Primary Role of the Unit

---

Type of Dispatch Delay

---

Type of Response Delay

---

Type of Scene Delay

---

Type of Transport Delay

---

Level of Care of This Unit

---

Vehicle Dispatch Location

---

Vehicle Dispatch GPS Location

---

Crew Member Level

---

Dispatch Notified Date/Time

---

Unit Notified by Dispatch Date/Time

---

Unit Arrived on Scene Date/Time

---

Arrived at Patient Date/Time

---

Transfer of EMS Patient Care Date/Time

---

Unit Left Scene Date/Time

---

Arrival at Destination Landing Area Date/Time

---

Patient Arrived at Destination Date/Time

---

Destination Patient Transfer of Care Date/Time

---

Last Name

---

First Name

---

Middle Initial/Name

---

Gender

---

Race

---

Age

---

Age Units

---

Date of Birth

---

First EMS Unit on Scene

---

Other EMS or Public Safety Agencies at Scene

---

Type of Other Service at Scene

---

Date/Time Initial Responder Arrived on Scene

---

Number of Patients at Scene

---

Mass Casualty Incident

---

Triage Classification for MCI Patient

---

Incident Location Type

---

Scene GPS Location

---

Incident Census Tract

---

Date/Time of Symptom Onset

---

Possible Injury

---

Cause of Injury

---

Mechanism of Injury

---

Trauma Center Criteria

---

Vehicular, Pedestrian, or Other Injury Risk Factor

---

Main Area of the Vehicle Impacted by the Collision

---

Location of Patient in Vehicle

---

Use of Occupant Safety Equipment

---

Airbag Deployment

---

Height of Fall (feet)

---

OSHA Personal Protective Equipment Used

---

ACN System/Company Providing ACN Data

---

ACN Incident ID

---

ACN Call Back Phone Number

---

Date/Time of ACN Incident

---

ACN Incident Location

---

ACN Incident Vehicle Body Type

---

ACN Incident Vehicle Manufacturer

---

ACN Incident Vehicle Make

---

ACN Incident Vehicle Model

---

ACN Incident Vehicle Model Year

---

ACN Incident Multiple Impacts

---

ACN Incident Delta Velocity

---

ACN High Probability of Injury

---

ACN Incident PDOF

---

ACN Incident Rollover

---

ACN Vehicle Seat Location

---

Seat Occupied

---

ACN Incident Seatbelt Use

---

ACN Incident Airbag Deployed

---

Cardiac Arrest

---

Cardiac Arrest Etiology

---

Resuscitation Attempted By EMS

---

Arrest Witnessed By

---

CPR Care Provided Prior to EMS Arrival

---

Who Provided CPR Prior to EMS Arrival

---

Any Return of Spontaneous Circulation

---

Date/Time of Cardiac Arrest

---

Date/Time Resuscitation Discontinued

---

Reason CPR/Resuscitation Discontinued

---

---

Date/Time of Initial CPR

---

Medical/Surgical History

---

Current Medications

---

Alcohol/Drug Use Indicators

---

Patient Care Report Narrative

---

Date/Time Vital Signs Taken

---

SBP (Systolic Blood Pressure)

---

DBP (Diastolic Blood Pressure)

---

Heart Rate

---

Pulse Oximetry

---

Respiratory Rate

---

Respiratory Effort

---

End Tidal Carbon Dioxide (ETCO2)

---

Glasgow Coma Score-Eye

---

Glasgow Coma Score-Verbal

---

Glasgow Coma Score-Motor

---

Glasgow Coma Score-Qualifier

---

Total Glasgow Coma Score

---

Temperature

---

Revised Trauma Score

---

Protocols Used

---

Medication Administered Prior to this Unit's EMS Care

---

Medication Given

---

Medication Dosage

---

Medication Dosage Units

---

Date/Time Procedure Performed

---

---

Procedure Performed Prior to this Unit's EMS Care

---

Procedure

---

Number of Procedure Attempts

---

Procedure Successful

---

Procedure Complication

---

Response to Procedure

---

Vascular Access Location

---

Indications for Invasive Airway

---

Date/Time Airway Device Placement Confirmation

---

Airway Device Being Confirmed

---

Airway Device Placement Confirmed Method

---

Airway Complications Encountered

---

Suspected Reasons for Failed Airway Management

---

Date/Time Decision to Manage the Patient with an Invasive Airway

---

Destination/Transferred To, Name

---

Destination GPS Location

---

Incident/Patient Disposition

---

EMS Transport Method

---

Reason for Choosing Destination

---

Type of Destination

---

Hospital Capability

---

Destination Team Pre-Arrival Alert or Activation

---

Date/Time of Destination Prearrival Alert or Activation

---

Disposition Instructions Provided

---

Emergency Department Disposition

---

First ED Systolic Blood Pressure

---

---

Emergency Department Recorded Cause of Injury

---

Emergency Department Procedures

---

Emergency Department Diagnosis

---

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