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FICEMS Statement of Recommendations for Comprehensive EMS Systems to Improve Post-Crash Care

Department of Defense

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Department of Homeland Security

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[The United States Department of Transportation National Roadway Safety Strategy](#) (NRSS) outlines the Department’s comprehensive approach to significantly reducing serious injuries and deaths on our nation’s highways, roads, and streets. It is the first step in working toward an ambitious long-term goal of reaching zero roadway fatalities. At the core of this strategy is a department-wide adoption of the [Safe System Approach Principles and Elements](#), which focuses on five key objectives: safer people, safer roads, safer vehicles, safer speeds, and **post-crash care**.

The objective of post-crash care is to enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices. The identification of post-crash care as a priority in the National Roadway Safety Strategy (NRSS) is a unique opportunity for Federal partners to collaborate on comprehensive Emergency Medical Services (EMS) system improvements for improved patient outcomes, prompting further collaboration within the Federal Interagency Committee on Emergency Medical Services (FICEMS).

Upon review of the NRSS and recommendations submitted by the National EMS Advisory Council, FICEMS recommends the following EMS system post-crash care strategies to improve patient outcomes. Recommendations are grouped into three categories: 1) Improve EMS personnel on-scene safety through data, research, education, and outreach; 2) Improve the availability and quality of EMS data; and 3) Improve the equitable delivery of EMS nationwide.

- 1. Improve EMS personnel on-scene safety through data, research, education, and outreach**
 - a. Support on-scene safety and traffic incident education for EMS clinicians. Types of education that would help EMS personnel manage post-crash care events include Traffic Incident Management (TIM), mass casualty, pediatrics, patients with special health care needs, emerging issues in electric vehicles, and on-scene mental and behavioral health education.
 - b. Investigate, promote, and support campaigns, standards, and technologies geared towards eliminating roadside first responder injuries and secondary crashes including “move over” laws and incident notification systems
- 2. Improve the availability and quality of EMS data**
 - a. Promote and support data collection by Federal, state, local, tribal, and territorial (SLTT) EMS agencies and the submission of data to NHTSA’s National EMS Information System (NEMSIS). NEMSIS provides data standards related to EMS’ response to motor vehicle

crash related (MVC) injuries and a database to enable post-crash care surveillance and data analysis necessary for system improvements.

- b. Link patient post-crash data systems and/or EMS assessments, such as NEMSIS, crash records, hospital records, trauma registry, pediatric readiness, etc. for patient quality improvement initiatives. Data system linkages may provide highway safety and EMS professionals with the data needed to assess patient outcomes and drive quality improvement initiatives to improve post-crash care.
- c. Explore applied research and data quality improvements to support NEMSIS and state EMS data. Promote external studies of NEMSIS data to determine how systems might be improved. Examine the existing data to better understand types of crash injuries, vehicular safety, and other related post-crash data elements.

3. Improve the equitable delivery of EMS nationwide

- a. Support on-scene safety and traffic incident education for patients on-scene. Types of education that would help EMS manage post-crash care patients include Traffic Incident Management, mass casualty, pediatrics, patients with special health care needs, emerging issues in electric vehicles, and on-scene mental and behavioral health education.
- b. Support engagement and collaboration among state highway safety, EMS, 911 offices, designated trauma systems, first responders, police, EMS agencies, FICEMS, and other EMS and trauma system stakeholders to seek and invest in equitable solutions. The active engagement and collaboration of these stakeholders provides an opportunity to address the needs of EMS systems to enhance response, improve emergency system coordination, improve post-crash patient outcomes, improve traffic incident management and extrication practices, and reduce post-crash care delays.
- c. Fund initiatives that lead to sustainable EMS system improvements. Funding is needed to sustain EMS systems statewide. EMS systems need appropriately trained emergency personnel, equipment, and resources to maintain operations to administer post-crash care. EMS funding would also support the expansion of online learning opportunities for EMS practitioners in rural communities.
- d. Promote and support the implementation of the [National Model EMS Clinical Guidelines](#) and the [National Guidelines for the Field Triage of Injured Patients](#). The guidelines were created as a resource to be used or adapted for use on a state, regional or local level to enhance prehospital patient care. The Guidelines include model protocols available for any EMS system to use in full or in part.
- e. Collaborate and engage emergency response organizations. Engagement with emergency response organizations would provide an opportunity to address challenges in providing EMS, leading to joint solutions to improve patient outcomes.

- f. Optimize evidence-based protocols for pre-hospital trauma care management including pediatrics and patients with special health care needs.
- g. Support of bystander care programs. According to the Centers for Disease Control and Prevention, trauma is the leading cause of death for Americans under the age of 45. Life-threatening injuries require immediate action to prevent an injured person from dying. Bystanders and law enforcement, especially in areas with longer EMS response times, are often best positioned to provide life-saving care. Programs such as the [Federal Emergency Management Agency's You Are the Help Until Help Arrives](#) and [Stop The Bleed](#) prepares the community to provide help on-scene until EMS arrives. 911 telecommunicators educated in Emergency Medical Dispatch are also critical in providing pre-arrival instructions so that bystanders can provide care to injured individuals until EMS arrives.
- h. Promote and support the inclusion of standardized first aid kits in passenger and first responder vehicles. Having a first aid kit in vehicles provides those first-on-scene and vehicle occupants with immediate access to first aid to help injured individuals in a crash. [The U.S. Department of Labor, Occupational Safety and Health Administration](#) has a basic list of recommended supplies and [Stop the Bleed](#) provides guidance as well.
- i. Promote and support projects that identify or reduce disparities in care provided to injured individuals. Assessments on current disparities would provide a complete understanding of community needs by identifying the unique health needs of special populations, such as children, elderly, and under-funded systems in communities. For instance, assessments on ambulance needs per square mile versus call volume, community needs, available assets in rural/urban communities, and health equity.
- j. Support the use of telehealth and provide infrastructure support for the development of telehealth systems in rural communities, with concerted efforts aimed to ensure health equity in remote, isolated, and rural areas. Telehealth affords access to emergency medicine specialist.
- k. Invest in technology and personnel to improve crash notification and response. Supporting the national transition to Next Generation 911 will improve automatic crash notification, incident geo-location, and response times to crashes. There is a need to invest in emerging technologies (such as OnStar, StarLink, etc), research, standards development, and education. A focus needs to include improving 911 data collection to better understand the challenges in location, geocoded location specifics (station, incident, care facility) as a standard, and call processing times for MVC responses. This would improve accuracy and integration between 911 locations and DOT roadway location data.
- l. Provide support to address language barriers. Invest in open access to translation services for EMS providers. Having access to an interpreter helps to address language barriers in the field which may hamper the delivery of post-crash care and improve outcomes.