National EMS Advisory Council
Committee Report and Advisory

FINAL

Committee: Preparedness and Education

Title: Emergency Medical Services (EMS) Response to Active Threat Incidents: A Multi-Faceted Approach to Preparedness and Coordination

Executive Summary

The intention of this advisory is to provide a comprehensive set of recommendations aimed at optimizing the preparedness and response of EMS to active threat incidents. The contemporary landscape of emergency events is increasingly punctuated by active threat incidents, defined by their unpredictable, dynamic, and rapidly evolving nature. Such incidents present unique challenges that stretch the capabilities and adaptive capacities of Emergency Medical Services (EMS), which have historically been structured around conventional medical emergencies. According to Kaji, Koenig, and Lewis (2010), the current hospital disaster preparedness paradigms fall short in handling the complexity and immediacy associated with active threat scenarios. Hence, there is an urgent imperative to holistically review, and where necessary, overhaul EMS preparedness protocols, training mod ules, and inter-agency coordination frameworks to align them with the unique demands posed by these volatile emergency contexts (Auf der Heide, 2006).

Traditionally, tactical response units like SWAT teams have been at the forefront of active threat incident management. However, the inherent uncertainty of these events implies that standard EMS units, typically untrained in tactical emergency care, will often be the first to respond, thereby facing threats they are ill-equipped to manage (Patil & Dutt , 2020). This presents an unavoidable risk not only to EMS personnel but also to the public who rely on these responders for immediate medical intervention. A 2018 study by Smith, Shapiro, and Sarani emphasized the unique wound profile in civilian public m ass shooting fatalities, reinforcing the need for specialized skills in wound treatment, rapid decision-making, and coordination with other agencies like law enforcement.

Furthermore, the importance of multi-agency coordination cannot be overstated. Acti ve threat incidents often blur the jurisdictional lines between various emergency services, necessitating a well-orchestrated, inter-agency approach to ensure an effective response. Memoranda of Understanding (MOUs) between agencies could be instrumental i n avoiding confusion and delay during these critical situations (Smith et al., 2018). Such a well-coordinated approach is not just a theoretical construct but an operational necessity in order to save lives and mitigate harm

during one of the most challeng ing forms of modern emergencies (Comfort, Ko, Zagorecki, 2004). The recent comprehensive report released by the Department of Justice regarding the active threat incident in Uvalde does more than chronicle the sequence of events; it delivers an unvarnished analysis of the EMS response. The incident at Uvalde highlights that active threats and the EMS response must be better prepared to respond to dynamic, kinetic events (US DOJ, 2024).

This advisory is aimed at providing a comprehensive set of recommendati ons aimed at optimizing the preparedness and response of EMS to active threat incidents, with specific attention to issues pertinent to training, standards, multi -agency coordination, and public education. This is not intended to recommend that every EMS clinician becomes a tactical EMT and tactical paramedic, but to provide them with the knowledge, skills, and abilities to interface with tactical EMS clinicians, and to better prepare them for scenarios where they are present and must assume the role of the frontline EMS clinician in dynamic and rapidly unfolding situations, situations that have developed beyond their control.

Recommendations
Federal Interagency Committee on EMS

Recommendation 1

The National EMS Advisory Council (NEMSAC) recommends that Federal Interagency Committee on EMS (FICEMS) convene a taskforce of experts in response to active threats to develop an educational framework that would incorporate tactical emergency medical care into the initial training of EMRs, EMTs, AEMTs, and paramedics (Callaway et al., 2011).

Recommendation 2

NEMSAC recommends that FICEMS identify and create a repository of continuing education, standards, guidelines, and best practices for tactical emergency care, through the Department of Defense (DoD) Committee on Tactical Combat Casualty Care (CoTCCC) for incorporation and utilization of all levels of EMS clinicians (Callaway et al., 2011).

Recommendation 3

NEMSAC recommends that FICEMS identify stakeholders who could develop a protocol -driven al gorithm that include an action plan for telecommunicators that would serve as a best practices model for active threat incidents for 9 -1-1 receiving and dispatch centers.

Recommendation 4

NEMSAC recommends that FICEMS convene a group of subject matter experts to identify examples of and to develop guidelines and recommendations regarding interoperability and technological solutions to facilitate real-time data sharing between EMS, hospitals, and law enforcement (Comfort et al., 2004).

Recommendation 5

NEMSAC recommends that FICEMS identify stakeholders within the federal government and non-governmental organizations who are developing and providing 'Stop the Bleed' programs to identify lessons learned from the provision of those programs.

Recommendation 6

NEMSAC recommends that FICEMS through EMS.gov, promote the current Stop the Bleed website https://www.stopthebleed.org/ to provide NGO's, schools, and non-federal government agencies a point of entry to improve access to these materials and programs.

Recommendation 7

NEMSAC recommends that FICEMS develop a framework of the essential elements for the writing of Memoranda of Understanding (MOUs) to facilitate multi-agency coordination in the setting of active threat incidents. (Smith et al., 2018).

Recommendation 8

NEMSAC recommends that FICEMS develop a framework for and sponsor demonstration projects of healthcare coalitions to streamline the allocation of resources and the sharing of information among different sectors during a dynamic active threat event (Barbera & Macintyre, 2007).

Recommendation 9

NEMSAC recommends that FICEMS develop a standard and a means for coordinating, decompressing, and a centralized system for live tracking of facility capabilities, in order to effectively route patients based on the nature of their injuries (Auf der Heide, 2006).

Recommendation 10

NEMSAC recommends that FICEMS develop a framework for utilizing stand-alone clinics, urgent care centers, and other facilities to support medical operations during an active assailant incident (FEMA, 2020, ASPR/TRACIE, 2018).

Recommendation 11

NEMSAC recommends that FICEMS develop a recommendation and model for accessibility to emergency supplies, comparable to fire extinguishers in public buildings, that should be easily accessible (Goolsby et al., 2018).

Recommendation 12

NEMSAC recommends that FICEMS convene a panel of subject matter experts (SME) to write a report on the modes of transportation to hospitals during these types of events and to make recommendations on how to best educate the public in preparation of an active threat incident *related to accessing emergency health care*. (Seamon et al., 2007).

Recommendation 13

NEMSAC recommends FICEMS coordinate with the Department of Homeland Security to incorporate as part of their national level exercises that patient surge at hospitals be part of every exercise (Kaji et al., 2010) and that all EMS stakeholders are included in the planning, exercise, and debriefing. These exercises should focus on participating EMS organizations to develop plans and participate in exercises that are focused on active threat incidents.

Recommendation 14

NEMSAC recommends that FICEMS identify concerned stakeholders who have continuing education, identify standards, guidelines, and best practices for canine care, for treating canines involved in law enforcement actions and search and rescue operations, as they are also at risk during these events (K9TCCC, 2023 and Palmer, 2016).

Recommendation 15

NEMSAC recommends that FICEMS promote scene safety for responders by providing funding for personal protective equipment for active threat incidents such as respiratory protection, body armor, and other tools, for example MCI kits, to help respond to active threats. This plan should also include ongoing sustainability for funding and replacement.

National Highway Traffic Safety Administration Office of EMS

Recommendation 1

NEMSAC recommends that NHTSA OEMS include provisions for inclusion of EMS provision of care in the cold, warm, and hot zones under the essential competency framework categories as a crucial component of the Emergency Medical Services Education Agenda 2050 and should be included in the final agenda document.

Scope and Definition

Since the seminal report, Accidental Death and Disability: The Neglected Disease of Modern Society, by the National Academy of Sciences and National Research Council in 1966, Emergency Medical Services (EMS) have undergone a significant transformation in terms of both capability and scale (National Academy of Sciences and National Research Council, 1966). These advancements have been instrumental in responding to an increasingly complex and volatile landscape of emergencies that have morphed over time. One particularly challenging aspect that requires our immediate attention is the alarming frequency of domestic and international terrorism events, dating back from the El Al terminal bomb scare at Kennedy Airport in 1973 to the tragic events of September 11, 2001 (Shapiro & Dausey, 2013).

Equally disquieting is the spate of mass shootings across the United States, a grim phenomenon that has roots as far back as the Camden incident of 1949 and the overpowering bloodshed of the Las Vegas tragedy of 2017 (Smith, Shapiro, & Sarani, 2018) resonate in our collective consciousness. Each state has had its share of these horrendous occurrences, and no community can be considered truly safe. Compounding the challenges of EMS response are the immediate and chaotic circumstances of these events and the grotesque aftermath they leave in their wake (Kaji, Koenig, & Lewis, 2010). To further compound this grim reality, there has been a troubling trend of first responders themselves becoming targeted, as evidenced by incidents such as the 2021 Tuscon, AZ shooting, the Webster, NY shooting, and the Sandy Springs Abortion clinic bombing (Palmer, 2016; Patil & Dutt, 2020).

Against this backdrop, the scope of these proposed recommendations is to deliver a comprehensive assessment and generate concrete recommendations aimed at enhancing the readiness and response mechanisms of EMS to active threat incidents. The paper will be inclusive of a multi-dimensional analysis, focusing on elements ranging from training and skills development of the incumbent EMS workforce to multi-agency coordination, public education, and tactical considerations, including canine care. Given the complex, dynamic, and often unpredictable nature of these events, it is critical that EMS evolves to meet these challenges through evidence-based practices, public-private collaborations, and inter-agency operability. This approach will necessitate an intensive exploration of established standards, psychological readiness, technological facilitators, and above all, a culture of perpetual preparedness and adaptability (Auf der Heide, 2006; Barbera & Macintyre, 2007; C-TECC, 2019).

Additionally, this advisory aims to scrutinize and advocate for the universal adoption of evidence-based training programs and guidelines, comparable to the Committee for Tactical Emergency Casualty Care Guidelines, Tactical Emergency Casualty Care (TECC) Guidelines for BLS/ALS Medical Providers. These standards should not only

provide a baseline for skills but also serve as a catalyst for multi-agency coordination involving law enforcement, fire departments, and healthcare facilities. This need for unified action is underscored by incidents where first responders themselves were the targets, magnifying the exigency for Memoranda of Understanding (MOUs) among different agencies for a seamlessly coordinated response (Smith et al., 2018; Comfort, Ko, & Zagorecki, 2004).

Ultimately, this advisory will conclude by amalgamating all these diverse yet interconnected facets into a cohesive set of recommendations. The end goal is to inform policy, inspire changes at the organizational level, and sensitize the public and stakeholders about their roles in this ecosystem. In the wake of an increasing number of active threat incidents, the importance of optimizing the EMS response cannot be overstated. Therefore, our focus will be on forging a balance between rapid medical interventions and ensuring the safety of first responders, which in turn, will contribute to the larger objective of minimizing morbidity and mortality during such devastating events (Goolsby et al., 2018; Jacobs et al., 2014).

Analysis

The dynamic and unpredictable nature of active assailant events presents unique challenges that require EMS to evolve beyond traditional medical emergency responses. Society has changed. The development of educational requirements, onboarding training, and operational procedures to enhance the preparedness of EMS clinicians, not by training them as tactical providers but equipping them with the skills necessary to effectively operate in the chaotic and unpredictable environments characteristic of these events is crucial to our workforce and the communities we provide care in.

This involves implementing new educational requirements, developing robust onboarding training, and developing the operational guidelines, policies and procedures that are essential to responding, but more importantly, re-acting to dynamic, high intensity events that may unfold directly in front of EMS units.

The suggested recommendations are not only pivotal in preparing EMTs and paramedics for the immediate demands of active threat events but are also crucial for the overall resilience and effectiveness of EMS organizations. These changes address the gaps in traditional EMS training and policies, which are ill-suited for the unpredictable and hazardous nature of such incidents. By focusing on education, training, and robust policies, EMS organizations can significantly improve their preparedness and response outcomes.

Furthermore, enhancing EMS capabilities in this way aligns with broader public safety objectives, ensuring a more coordinated and efficient response across all emergency services, ultimately saving more lives and reducing the overall impact of these tragic incidents.

EMS systems, built fundamentally for conventional medical emergencies, now face the complex task of adapting to the unpredictable and rapidly evolving nature of modern threats. The dynamic nature of these situations calls for a versatile skill set among EMS personnel that transcends traditional medical care. The conventional first responder is often the de facto front line in these situations, as highlighted by Patil and Dutt (2020). Hence, the focus must shift towards equipping these individuals with the skills to navigate the volatility of such scenes safely and effectively, the ability to roster and deploy adequate resources may not be possible. It's not about transforming EMS clinicians into tactical experts but about imbuing them with the knowledge and tools to make swift, informed decisions in the face of such threats. The strategic overhaul of EMS preparedness, with an emphasis on adaptive training, policy reform, and robust multi-agency coordination, is not just desirable but compulsory for the modern age of emergency response. It is imperative that EMS organizations and stakeholders view these enhancements not as optional but as essential adaptations to the modern landscape of emergency response.

Strategic Goals

Provide additional training opportunities for EMS clinicians to be better prepared to respond to incidents with active threats. This should include EMS-specific training, in areas including triage, bleeding control, and rapid decision-making under pressure, as well as multi-disciplinary training with other responders.

Increase access to electronic tools such as patient tracking systems that would benefit on-scene management, hospital intake, and EMS system response to keep track of patients from initial response on scene through discharge.

Promote scene safety for responders by providing funding for personnel protective equipment such as respiratory protection, body armor, as well as MCI kits, and other tools to help respond to active threats.

Strategic Vision

A transformative shift in our approach to EMS preparedness, especially in response to active threat incidents needs to occur. The landscape of emergency situations is

evolving; thus, our training and response frameworks must adapt to meet these changes. Active threats, characterized by their unpredictable and dynamic nature, require EMS personnel not only to be skilled in conventional EMS responses but also to be proficient in tactical emergency care. These types of events are unforeseeable and are rapidly unfolding. In the face of unpredictable active threat incidents, our strategic vision must prioritize flexibility and rapid adaptability, ensuring that our EMS teams are always prepared to respond effectively under any circumstances. By embracing a proactive and resilient approach, we can safeguard our communities and provide the highest level of care even in the most chaotic situations.

This necessitates a comprehensive overhaul of current training and education. This vision for a robust, adaptable EMS system is grounded in a commitment to continuous improvement and innovation, ensuring that we are always prepared to respond effectively to the challenges posed by the modern world's emergent threats.

Conclusion

In conclusion, the emergent complexities of active threat incidents call for a transformative shift in the planning, training, and inter-operational coordination of EMS. As these high-threat scenarios continue to unfold in unpredictable ways, there is a moral and ethical obligation for EMS clinicians to elevate their capabilities and methodologies. This multi-faceted approach does not just require enhanced skill sets or better equipment; it mandates a culture of perpetual preparedness, evidence-based tactical medical training, strategic partnerships with other emergency and healthcare agencies, and a robust, data-driven, real-time decision-making framework (Auf der Heide, 2006; Comfort, Ko, & Zagorecki, 2004). Anything less would be an abdication of the core mandate of EMS, which is to save lives and mitigate harm in the face of any emergency.

In light of the aforementioned points, it is imperative for governing bodies, healthcare agencies, and stakeholders to urgently invest in comprehensive training modules, including the adoption of the Tactical Emergency Casualty Care (TECC) guidelines, and public education initiatives like Stop the Bleed. Furthermore, there must be an acceleration in the formation of healthcare coalitions and the development of interoperable communication technologies to enable seamless data and information sharing among various emergency services during a dynamic event (Barbera & Macintyre, 2007; C-TECC, 2019). Through a coordinated, well-funded, and forward-thinking approach, it is possible to significantly enhance the effectiveness of EMS response to active threat incidents, thereby fulfilling the ultimate objective of safeguarding human lives in these exigent circumstances.

Definition

For the purposes of this advisory, t he working definition of an active threat incident is: An armed person who has used any type of weapon to inflict deadly physical force on others and continues to do so while having unrestricted access to additional victims (IAED). This may include but is not limited to, firearms, chemical, biological, radiological, nuclear, explosives, and edged weapons.

Note

The CoTCCC, is part of the Joint Trauma System, under the DoD Center of Excellence (https://jts.health.mil/index.cfm/committees/cotccc)

The Committee for Tactical Emergency Casualty Care (C -TECC) is an independent civilian entity but maintains a close relationship with CoTCCC for guidance and supp ort. There are applicable references for C -TECC and Tactical Emergency Casualty Care (TECC) that are important to EMS. The C-TECC exists to develop and accelerate evidenced and best -practiced -based guidance for medical response and medical treatment of the injured during high -risk and atypical civilian operational scenarios. While many different EMS educational institutions offer programs that are referred to as TECC, they do not research, develop, or write the guidelines and evidence -based practice, instea d, they become educational affiliates of the C-TECC implementing the research they have conducted, their guidelines and guidance into training programs they offer. The C -TECC is organizationally agnostic, in that they represent a broad cross -section of EMS clinicians. They do not offer a product for sale. Their guidelines are freely available to anyone. They do not endorse any specific educational program, instead organizations agree to teach TECC in accordance with the Principles of Guidelines for Educatio n that are used by C-TECC. GTECC does not confer exclusivity to any one group to present their materials or who offer educational programs (https://www.c -tecc.org/partners).

CoTCCC, through its relationship with C -TECC has the opportunity to identify th ose guidelines and educational guidance that would benefit the non -military EMS community as a whole, and in turn promulgate those guidelines and educational frameworks through FICEMS for distribution to their federal partners to improve trauma care.

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