ACEP
HIGH THREAT EMERGENCY CASUALTY CARE TASK FORCE SUMMARY RECOMMENDATIONS FOR REDUCING MORTALITY IN HIGH THREAT MASS CASUALTY INCIDENTS

October 30, 2017

Executive Summary

Dr. Jay Kaplan established the American College of Emergency Physicians Task Force on High Threat Emergency Casualty Care in 2016 to provide the College leadership with strategic guidance regarding preparedness and response to high threat Active Violent Incidents (AVI). Active Violent Incidents (AVI) include active shooter incidents, bombings, acts of terror, and incidents where an ongoing threat shapes the medical response (e.g. ongoing gang violence). Drs. Callaway and Piazza were selected as co-chairs, supported by Board liaison, Dr. Perina.

The mission of the Task Force is to help drive public policy and operational response paradigms that will help reduce trauma mortality from high threat, dynamic mass casualty incidents. The Task Force is a mechanism to consolidate and coordinate the multiple efforts across ACEP sections and committees while collaborating with other key organizations and stakeholders. The expertise of strong, leading partner organizations are key to the development and execution of the Task Force recommendations.

The Task Force met in 2016 and created five critical Work Groups to address key challenges in advancing the science and practice of trauma response in high threat civilian incidents. Work Groups focused on critical gaps identified by national subject matter experts across the emergency medicine, emergency medical services, trauma surgery, national security, and counter-terrorism communities. The Task Force Work Groups include:

1. All-hazards guidelines and standards
2. Operational gap analysis and preventable death analysis database development
3. Modernization of scalable after action and process improvement system
4. Translation of military lessons learned
5. Public relations and advocacy

The Task Force appreciates ongoing College support for efforts to provide a structure through which the nation's leading experts in High Threat Emergency Casualty Care can work together towards the common goal of eliminating potentially preventable mortality in AVIs. The Task Force work is already making a difference nationally and internationally.

The leadership of the Disaster Medicine Section, Tactical Medicine Section and Disaster Preparedness and Response Committee reviewed this report and endorse the Task Force recommendations to the Board.

Overview of Problem

Trauma is the leading cause of death in civilians 1-45 years of age. The National Academy of Science, Engineering and Medicine (NASEM) recently estimated that in the past 10 years, there were up to 300,000 potentially preventable trauma deaths in the United States. Trauma care in a high threat environment is even more challenging, complicated by ongoing threat, complex wounding patterns, potential for mass casualties, significant media attention, legal ramifications, etc.

Active shooter incidents (e.g. Orlando Pulse shooting, Aurora Century Theater shooting, etc.), complex coordinated attacks (e.g. Mumbai, Paris, Brussels, Manchester, etc.) and general acts of terror (e.g. Boston bombing, London Bridge attack, etc.) are occurring with increased frequency globally. These attacks are becoming more sophisticated and increasingly targeting system vulnerabilities in order to maximize mortality and political impact.[i,ii,iii,iv,v] One unifying theme is that Emergency Physicians and pre-hospital emergency response personnel are universally on the frontlines of these attacks.

The work of the High Threat Emergency Casualty Care Task Force is fundamentally based upon the understanding that operational considerations dictate clinical care. Accordingly, high threat incidents require a paradigm shift in preparedness and response that incorporates issues such as patient access and evacuation when designing clinical practice guidelines.

This philosophical underpinning that the environment shapes response means many of the lessons from intentional high threat incidents are scalable and can be applied in dynamic natural and/or manmade disasters. Further, they can be deployed to reduce potentially preventable death from all trauma, making the work of the Task Force extremely relevant.

Emergency Medicine physicians have historically led in prehospital care and should continue to do so in the face of evolving threats to our communities. ACEP can serve as a leader and convening authority as we advance the science and practice of trauma care in high threat incidents. The roadmap to success has been taking shape over decades and, with an empowered task force backed by the strength of the College, the goals can and will finally be accomplished.

Appendix A provides a summary of Work Group recommendations.
Appendix B: Contributing liaison partners and stakeholders

Appendix A: Summary of Work Group Recommendations

All-hazards guidelines and standards

1. Endorse the work of the Committee for Tactical Emergency Casualty Care (C-TECC) as the standard of care for pre-hospital response to civilian high threat incidents.

2. Assign an ACEP liaison officer as a voting member of the C-TECC to align enterprise goals.

3. Empower the High Threat Task Force to vet and validate TECC guidelines in order to allow wider dissemination of best practice response guidelines to the ACEP network.

4. Identify potential mechanisms for ACEP to support, validate and disseminate Task Force Clinical Practice Guidelines (CPG) recommendations.

5. Articulate strategy to integrate education, training and implementation into broader trauma/ preparedness response system.

Operational gap analysis and preventable death analysis database development

1. As ACEP has made Zero Preventable Deaths from Trauma a College goal, the College should specifically target acquisition and analysis of data from high threat incidents to improve crisis response and serve as a model for larger data collection initiatives.

2. ACEP should support HTECC Task Force in expansion of its collaboration with the Research, Tactical, Disaster, Event and Legislative and Government Affairs sections to facilitate coordination with ACS COT research efforts led by Task Force liaison Dr. Brain Eastridge.

3. ACEP legislative and government affairs experts should lobby Congress and engage State ACEP chapters to eliminate barriers to expeditious data acquisition, specifically the creation of a national database that integrates National EMS Information System (NEMSIS) and Trauma Quality Improvement Program (TQIP) data with coroner data to address "how people die and survive" after high threat incidents.

Modernization of scalable after action and process improvement system

1. Create a comprehensive strategy for acquisition, analysis and rapid dissemination of critical observations post high threat incident. This strategy should include the development and piloting of "Go Teams", standardized qualitative and quantitative assessments, and development of a secure online platform for data management.

2. ACEP legislative affairs should work with the HTECC Task Force to identify key legal barriers to data acquisition and management and develop an aggressive advocacy strategy to help advance the practice of the science of high threat trauma care.

3. ACEP public affairs, in coordination with legal, should devise an outreach program that targets all EM physicians and informs them about the Task Force post-incident analysis process.

4. ACEP Section/ Committee engagement: The HTECC Task Force will continue to serve as the coordinating body for the ACEP Sections (TEMS, Disaster, International, Government Affairs, etc.) and the Disaster Preparedness and Response Committee working to create and execute a comprehensive after action review strategy.

Translation of military of lessons learned

1. Support and finalize development of Military Health System Strategic Partnership American College of Emergency Physicians (MHSSPACEP).

2. Develop continuous learning system infrastructure that, incorporates the "Go Team" concept, provides secure online data acquisition and analysis, and drives public policy recommendations regarding response to high threat situations and trauma system design.

3. Prioritize the development of opportunities to enhance military-civilian training partnerships and expand knowledge exchange.

4. Identify educational topics for ACEP Educational Meetings including but not limited to high threat casualty response, system design, process improvement, leadership, and existing knowledge translation efforts.

5. Advocate/Educate U.S. Congress and higher levels of healthcare leadership (ACHE, AAPL, AHA) on the National Academies of Science, Engineering and Medicine (NASEM) report, ACEP's role in supporting the Zero Preventable Death initiative.

6. Define operational high threat competency in emergency medicine and educate EM leadership on the challenges faced with maintaining military competencies.

7. Prioritize research opportunities around trauma care in high threat situations.

Appendix B: Contributing liaison partners and stakeholders (alphabetical)

- American Academy of Emergency Medicine
- American College of Surgeons-Committee on Trauma
- Committee for Tactical Emergency Casualty Care
- International Association of Chiefs of Police
- The Interagency Board
- National Association of EMT's
- National Association of EMS Physicians
- National Association of State EMS Offices
- Assistant Secretary for Preparedness and Response (ASPR)
- Emergency Medical Services for Children
- National Highway Traffic Safety Administration
- United States Department of Homeland Security

[i] Ding F, Ge Q, Jiang D, Fu J, Hao M. Understanding the dynamics of terrorism events with multiple-discipline datasets and machine learning approach. PLoS One. 2017 Jun 7;12(6):e0179057

[ii] Martens A, Sainudiin R, Sibley CG, Schimel J, Webber D. Terrorist attacks escalate in frequency and fatalities preceding highly lethal attacks. PLoS One. 2014 Apr 22;9(4):e93732.

[iii] Bogen KT, Jones ED. Risks of mortality and morbidity from worldwide terrorism: 1968-2004. Risk Anal. 2006 Feb;26(1):45-59. PubMed PMID: 16492180.

[iv] Singer AJ, Singer AH, Halperin P, Kaspi G, Assaf J. Medical lessons from terror attacks in Israel. J Emerg Med. 2007 Jan;32(1):87-92. PubMed PMID: 17239737.

[v] Carli P, Pons F, Levraut J, Millet B, Tourtier JP, Ludes B, Lafont A, Riou B. The French emergency medical services after the Paris and Nice terrorist attacks: what have we learnt? Lancet. 2017 Jul 25. pii: S0140-6736(17)31590-8.