The Special Operations Medical Association's Official Journal

JSOM

JOURNAL *of* SPECIAL OPERATIONS MEDICINE™

Summer 2015
Volume 15, Edition 2

THE JOURNAL FOR OPERATIONAL MEDICINE AND TACTICAL CASUALTY CARE

Inside this Issue:

Dedicated to the Indomitable Spirit and Sacrifices of the SOF Medic

A Peer-Reviewed Journal that Brings Together the Global Interests of Special Operations' First Responders

The Committee for Tactical Emergency Casualty Care (C-TECC): Summer Update

David W. Callaway, MD; Reed Smith, MD;
Geoff Shapiro, EMT-P; Brendan Hartford, EMT-P; Sean McKay, EMT-P; Rich Kamin, MD

TRAINING AND GRANTS UPDATE

A recent internal survey revealed that in the past 2.5 years, members of the Board of Directors and Board of Advisors have assisted in providing Tactical Emergency Casualty Care (TECC) training to at least 68,213 first-care providers, nonmedical first responders (i.e., law enforcement), Fire, emergency medical services (EMS), emergency management, and hospital-based providers. This is likely a vast understatement of training numbers, as it reflects a small sample of self-reported numbers and does not include private-industry training numbers or local "grass-roots" TECC programs.

Building on this success, the US Department of Homeland Security's Federal Emergency Management Agency (FEMA) awarded the George Washington University (GWU) School of Medicine and Health Sciences (SMHS) a $1,308,422 continuing training grant (CTG) based on the core principles of TECC. The FEMA National Training and Education Division administers the CTG program. As described by FEMA, "the program develops and delivers innovative training programs that are national in scope and have an important role in the implementation of the National Preparedness System by supporting the building, sustainment, and delivery of core capabilities essential to achieving the National Preparedness Goal of a secure and resilient Nation. Delivering core capabilities requires the combined effort of the whole community, rather than the exclusive effort of any single organization or level of government."

The CTGs support further development of the National Preparedness System. GWU will use the grant to develop training programs and other resources that specifically focus on the "medical readiness/immediate victim care at mass casualty events." The overarching goal of GWU's training is to better prepare citizens (first-care providers) and first responders to provide care during events where there may be a delay in traditional response, due to operational challenges and barriers. In addition, the TECC-based CTG will teach responders to work in environments in which they have not traditionally worked in the past. First receivers will be trained to take delivery of patients who may have been treated under new response paradigms and patient-care guidelines.

GWU will base its training on the tenets of TECC, which is a set of evidence-based, best-practice medical treatment guidelines. TECC, which was formally established in 2011, has quickly become the accepted civilian standard for care during atypical events. In 2013, the C-TECC outlined the Active Violent Incident Trauma Chain of Survival that identified the critical role played by nonmedical providers in improving survival after mass violent incidents (e.g., any atypical high-threat/high-impact event including active shooter/active violence and mass casualty emergencies). Specifically, the Chain of Survival identifies the key roles of:

- First-care providers: citizens and bystanders
- First responders
- Medical first responders
- First receivers: emergency departments at all levels of trauma certification (including nontrauma centers)

An integral component of the training also involves a response model called "Rescue Task Force" (RTF), which enables law enforcement, fire, and EMS personnel to rapidly deploy in a coordinated effort into areas that have been cleared, but not secured, to initiate treatment at or near the point of wounding, and effect rescue of survivors. RTF was first made operational by the Arlington County Fire Department in Virginia, and is now in use by many public safety agencies across the world. Members of C-TECC have worked closely with various agencies to assist in the development and training

TECC, RTF, and other escorted "warm-zone" response models domestically and internationally.

Additionally, C-TECC members continue to be active members of the Interagency Planning Group and workshop faculty and facilitators during Joint Counter Terrorism Awareness Workshop Series (JCTAWS) deliveries throughout the nation. JCTAWS is a 2-day event that prepares jurisdictions for responding to the threat and consequences of a complex attack on their cities. The workshops are sponsored by the Department of Homeland Security (DHS) FEMA, Federal Bureau of Investigation, and National Counter Terrorism Center. TECC and High-Threat Incident/All-Hazard Response are prominently featured throughout JCTAWS.

Accompanying the JCTAWS workshops, FEMA's Office of Counter Terrorism and Security Preparedness has also sponsored several Technical Assistance (TA) deliveries to jurisdictions seeking help in developing their TECC programs. The TAs have been delivered throughout the nation to cities, including Boston, Massachusetts; Charlotte, North Carolina; Philadelphia, Pennsylvania; Portland, Oregon; Seattle, Washington; San Francisco, California; and Chicago, Illinois.

C-TECC and NTIC Coordination

The leadership of the National TEMS Initiative and Council and C-TECC have worked closely since the inception of both organizations. The recent DHS-sponsored forums on active-shooter response acknowledged the need for common operating language and principles across both Special Operations and conventional civilian first response. Partially as a result of these observations, a small group of stakeholders is convening to further streamline the integration of TECC principles and alignment of mission statements.

Statement on Patrol Tourniquets

The C-TECC strongly supports the development and deployment of comprehensive patrol tourniquet programs.

Supporting Rationale

In 2011, the C-TECC published its first set of guidelines.[1] This document, now 4 years old, clearly articulated the importance of law-enforcement tourniquet application in the TECC Trauma Chain of Survival and recommended it as a skill set for all law enforcement personnel. These original TECC guidelines served as the scientific support for patrol tourniquet programs in Wisconsin, Indiana, Illinois, Virginia, New York, North Carolina, Arizona, and Florida (D. Callaway, C. Cook, A. Fisher, R. Mathews, R. Smith; personal communications, January 2015). Recently, the American College of Surgeons Committee on Trauma published evidence-based guidelines that added further support to the TECC guidelines and expanded use of prehospital tourniquets.[2]

Retrospective data from Iraq and Afghanistan clearly demonstrate that early, appropriate tourniquet application saves lives.[3–5] Now, anecdotal civilian reports support that law enforcement-applied tourniquets also save lives. Unfortunately, no national or regional database exists yet to capture law enforcement (LE) life-saving interventions (LSI). The Carolinas Medical Center Division of Operational and Disaster Medicine is developing a database to address this knowledge gap. Agencies will (and have already) voluntarily provide data on LE LSI and assist with the acquisition of additional supporting documentation as necessary. The goal is to document interventions and attempt to link these data to outcomes. Currently, law enforcement agencies from Arizona, South Carolina, North Carolina, Florida, and Illinois have provided data on trauma care provided by officers in tactical and nontactical encounters. The program managers hope that this database can be used in coordination with the Law Enforcement Officers Killed and Assaulted (LEOKA) database, Violence Against Law Officer Research (VALOR) project, and other organizations (e.g., American College of Emergency Physicians, National Association of EMS Physicians, National Tactical Officers Association, Special Operations Medical Association, or International Association of Chiefs of Police) directed initiatives to shape the public policy discussion surrounding the appropriate allocation of resources for training and response.

Strategic Future: Call for Action to Unite Military to Civilian Lessons Learned

Since its inception, C-TECC has worked carefully and closely with members of various military and tactical medical communities, including Committee on Tactical Combat Casualty Care, SOMA, ACEP Civilian Tactical Emergency Medical Support section, NAEMSP, and the NTOA to ensure the appropriate and complete translation of military medical lessons learned. While exploring the military experience, C-TECC has been able to account for the significant differences between civilian resources, patient populations, and systems when developing the guidelines. The TECC guidelines are now the civilian standard of care for high-threat medical incidents and the C-TECC continues to work with other stakeholders to advance and evolve the guidelines.[6–9] C-TECC affirms its commitment to partner with interested entities to continue leading the effective translation of military lessons learned and grow the area of high-threat medical care.

References

1. **Callaway DW, Smith ER, Cain J, et al.** Tactical emergency casualty care (TECC): guidelines for the provision of prehospital trauma care in high threat environments. *J Spec Oper Med*. 2011;11:104–122.
2. **Bulger EM, Snyder D, Schoelles K, et al.** An evidence-based prehospital guideline for external hemorrhage control: American College of Surgeons Committee on Trauma. *Prehosp Emerg Care*. 2014;18:163–173.
3. **Eastridge BJ, Mabry RL, Seguin P, et al.** Death on the battlefield (2001–2011): implications for the future of combat casualty care. *J Trauma Acute Care Surg*. 2012;73(6 Suppl 5): S431–437.
4. **Butler FK Jr, Blackbourne LH.** Battlefield trauma care then and now: a decade of Tactical Combat Casualty Care. *J Trauma Acute Care Surg*. 2012;73(6 Suppl 5):S395–402.
5. **Kotwal RS, Montgomery HR, Kotwal BM, et al.** Eliminating preventable death on the battlefield. *Arch Surg*. 2011;146: 1350–1358.
6. US Fire Administration Fire/Emergency Medical Services Department Operational Considerations and Guide for Active Shooter and Mass Casualty Incidents. FEMA. September 2013. www.usfa.fema.gov/downloads/pdf/publications/active_shooter_guide.pdf. Accessed 1 March 2015.
7. International Association of Fire Fighters Statement: Rescue Task Force Training. www.acphd.org/media/372826/iaff_rtf_training_position_statement.pdf. Accessed 1 March 2015.
8. **Gerold K.** National Tactical Officers Association (NTOA) TEMS Position Statement. 2014. ntoa.org/sections/tems/tems-position-statement. Accessed 2 March 2015.
9. **National Association of Emergency Medical Technicians.** Civilian Tactical Emergency Medical Support (TEMS). In: *Prehospital Trauma Life Support*, 8th ed. Burlington, MA: Jones & Bartlett Learning; 2015.