

Law Enforcement Tactical Emergency Casualty Care (TECC) Training and Individual First Aid Kits (IFAK) White Paper



Mission-appropriate aspects of tactical emergency casualty care (TECC) and the use of individual first aid kits (IFAK) should be part of basic training and equipment issued for all local emergency responders.

Law enforcement is a dangerous occupation. Law enforcement officers (LEO) operate, often alone, in unsecured and hazardous conditions interacting with persons who may be unstable, unpredictable, and potentially deadly. LEOs are routinely involved in high risk operations such as high speed emergency response and vehicle pursuits, active violence interdiction, high risk warrant service, and traffic stops where the officers are vulnerable to both directed violence by detained occupants and on-going vehicular traffic.

Despite advances in tactical training and ballistic protection, on average 54 LEOs were fatally assaulted each year in the United States from 2002-2011 (Federal Bureau of investigation, 2011). When examining all causes of death over the past decade, an average of 149 LEOs were killed in the line of duty per year (National Law Enforcement Officers Memorial Fund, 2014). Not only are line of duty deaths significant, but during that same period there was an average of 15,404 felonious assaults a year against officers that resulted in officer injury (National Law Enforcement Officers Memorial Fund, 2014). According to the Bureau of Labor Statistics, law enforcement remains an occupation with a high rate of fatal injury. Fifteen LEOs per 100,000 were killed in the line of duty in 2012, while the 2012 national average for all occupations was 3.2 per 100,000 (US Department of Labor, 2013). In 2014, 118 officers were killed in the line of duty, 59 of whom were killed by assault or gunfire. (Officer Down Memorial Page, 2014)

Programs are being developed to provide LEOs with very basic medical training and equipment for self- or buddy-treatment of injured officers in the first few minutes after wounding. This rapid point-of-wounding care necessitates initiation of medical care prior to complete tactical control of active threats and prior to the availability of traditional emergency medical responders. Pre-hospital fire/EMS medical response to an injured LEO is often delayed due to scene safety concerns. The window of opportunity for critical, live-saving interventions can be lost with even short delays in care after penetrating trauma. LEO medical capabilities should address care that must be performed immediately, prior to the arrival of fire/EMS assets, and that can be provided by the wounded officer and/or fellow LEOs on scene.

The medical requirements faced by LEOs under fire are somewhat analogous to the combat setting. Over generations of military conflict, US forces have experienced incrementally decreased fatality rates as medical care was effectively brought closer to the battlefield

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(Goldberg, 2010). The case fatality rate for combat casualties in the War on Terror in Afghanistan and Iraq is below 10% for the first time in history, down from more than 15% in Vietnam (Holcomb, 2006). A substantial part of this improvement has been attributed to the concept of Tactical Combat Casualty Care (TCCC), developed by the US Special Operations medical community. Aggressive, directed, point-of-wounding TCCC by non-medical troops in the form of self- and buddy-treatment, as well as continuity of TCCC by medical non-combatants represents significant enhancement in the initial echelons of casualty care.

To translate this battleground success to improved care of the civilian LEO in hostile or threat environments, a nonprofit group of civilian operational medical and tactical experts developed a consensus, evidenced-based civilian adaptation of TCCC in 2011. The resulting program is called Tactical Emergency Casualty Care (TECC).

TECC guidelines are developed and maintained in an open forum for civilian and non-military federal first responders and other medical professionals, taking into account the nuances of civilian and non-military federal first responders, local community resources, liability, scopes of practice, and the required cross-disciplinary interoperable language that is unaccounted for in the military TCCC guidelines. Importantly, these stabilizing medical techniques can be easily applied by trained and equipped personnel for any life-threatening emergency in which circumstances constrain or delay the traditional EMS response. For example, this approach might have been useful at some mass casualty incidents involving active shooters in recent years.

We believe that standardization among the training and equipment supplied to LEOs would enhance the provision of pre-hospital point of wounding care and allow for quality control, common language, and interoperability.

As such, the InterAgency Board recommends two to four hours of medical training for LEOs, which includes the following:

- The concepts of TECC phases of medical care and the appropriate non-medical first responder application of TECC in relation to active threats. The primary objectives of this medical training are hemorrhage control maneuvers, airway and basic respiratory management, and identification and management of shock and hypothermia.
- Both didactic and practical elements should be included in TECC training for non-medical responders.
 - Didactic training: TECC background and principles, equipment overview
 - Practical training: Rapid physical assessment, basic airway management, use of commercial and improvised tourniquets, emergency compression bandages, hemostatic agents, vented and improvised chest seals, hypothermia prevention, and expedient lifts/moves/carries

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Additional consideration for expanded TECC training should be given to the following, depending on the missions of the law enforcement entity and community emergency response configurations:

- Basic concepts of triage and mass casualty management
- Transport decisions: traditional fire/EMS transportation versus rapid transport via police or other non-medical vehicles (department, agency, region, or jurisdictional policy; state laws and regulations)
 - Decisional authorities vary and may be impacted at the various layers of organizational government. These present legal hazards if they are breached.
- Integrated tactical operations with area fire/EMS agencies
- Familiarity with state trauma regulations as well as capabilities of local hospitals and regional trauma centers
- Standard precautions/principles of body substance isolation (BSI)
- Periodic skills and knowledge refreshers
- Scenario-based practical applications

Additionally, the InterAgency Board recommends that an individual first aid kit, commonly referred to as an IFAK or ‘blow out’ kit, be issued to each officer trained in initial TECC medical care of the wounded. The contents of the kit should be chosen specifically for use by the non-medical law enforcement officers. The medical equipment and supplies in the kit do not need to meet military TCCC recommendations, but at a minimum must have evidenced-based proven efficacy when used at or near the point of wounding. The LEO IFAK should include, at a minimum, the following:

- One commercially available windlass-style tourniquet
- One package of hemostatic gauze
- One roll of compressed cotton gauze
- One mechanical pressure bandage (e.g. ace wrap or other elastic bandage)
- One vented chest seal
- Non-latex gloves

Additional items for consideration include:

- One nasopharyngeal airway
- Small roll duct tape
- A pair of trauma shears
- A zippered bag with compartments or elastic straps holding IFAK contents in place. The exterior of the bag should have multiple attachment points, allowing it to be mounted in a vehicle, on a backpack or on a duty belt.

** Please contact the InterAgency Board at info@interagencyboard.us with any comments, feedback, and questions. Additional information on the InterAgency Board is available at www.IAB.gov.

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