

**The Bill Blackwood
Law Enforcement Management Institute of Texas**

**“Raise your hand if you are still alive”
Integrating Law Enforcement and Emergency Medical Services
During Critical Incident Response**

**A Leadership White Paper
Submitted in Partial Fulfillment
Required for Graduation from the
Leadership Command College**

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June 2019**

ABSTRACT

While procedures surrounding police response to critical incidents and active shooters have drastically evolved since the Columbine High School shooting in 1999, the current paradigm is highly-focused on rapidly dominating and neutralizing the threat. While this is successful in stopping the propagation of further violence and injury, it does little to help those who are already injured and may die as a result of their wounds and the time it takes to provide them treatment. Recent critical incidents in the US involving a large number of wounded have begun to shed light on the pitfalls of this current modus operandi. Many of these mass casualty events like the Las Vegas Mandalay Bay shooting, or the Pulse Nightclub shooting in Orlando Florida were large-scale events that persisted for several hours before police were able to feel confident that the threat(s) had been neutralized. In instances such as these, it would be unacceptable to keep rescue outside of the theater of operations for this amount of time.

In an effort to save as many lives during and after a critical incident, police departments should begin establishing agreements, protocols, and training with their jurisdiction's emergency medical services, fire departments, and rescue services to create fluidly integrated "task forces" that maintain the ability to engage hostiles and adequately treat and rescue wounded persons. Furthermore, these "Rescue Task Forces" must maintain the ability to be a self-contained and self-sustaining unit capable of operating independently of one another as an element of a more-extensive force. The evolution of response to active attacks has wholly adopted the mantra, *Stop the Killing*; now law enforcement must collectively focus on the next phase, *Stop the Dying*.

TABLE OF CONTENTS

	Page
Abstract	
Introduction	1
Position	5
Counter Arguments	10
Recommendation	13
References	18

INTRODUCTION

While law enforcement agencies across the nation have changed the method they respond to active critical incidents in the last 20 years; the country has experienced a new level of terror in recent years inciting the need for even more dynamic evolution in response protocols to ultimately save lives and further protect the public. On April 20, 1999, Eric Harris and Dylan Klebold, nearly single-handedly ushered in a term that would become synonymous with mass murders involving firearms in the United States; on that day, they became the nation's first "active shooters" (Blair, Nichols, Burns, & Curnutt, 2013). The killing of 12 students and one teacher that day at Columbine High School in Littleton, Colorado, and more specifically, law enforcement's response to the incident, is still considered one of the largest news stories of its time and effectively initiated a pendulum swing of how law enforcement approached mass casualty critical incidents like active shooter events. During the following years, law enforcement agencies across the nation began reassessing their active shooter/critical incident response protocols, shifting from a policy of containment to that of rapid engagement of the threat in an effort to "stop the killing" (Blair et al., 2013). The direct benefit of this paradigm shift and subsequent adoption of more-universally trained tactics was observed during both the Virginia Tech shooting in 2007 as well as the Sandy Hook school shooting in Newtown, Connecticut in 2012 (Armstrong & Frykberg, 2007).

From an average citizen's standpoint, it is understandably difficult to consider two of the deadliest mass shootings (and the deadliest mass shootings at their time) as successful examples of police tactics; however, when looked at objectively, both critical incidents illustrate how evolutions in response protocols can potentially save lives.

Using the Columbine shooting as a baseline, officers did not make entry into the high school until 44 minutes after the first shots were fired, and while this seems like an excessively long period of time, the standard operating procedure of most police departments at that time in response to a shooting was to contain the incident and call a specialized unit trained for critical incident response; most commonly referred to as "SWAT" (Schildkraut & Muschert, 2013). As that pendulum swung, police tactics nationwide began focusing more on training first line officers to rapidly dominate and neutralize the threat and to not wait for specialized units to arrive on the scene.

As a result, during the Virginia Tech shooting, officers arrived on scene and made entry into the building only five minutes after the first 911 call was received, and tactical medics began triaging and treating the 59 gunshot victims inside (Armstrong & Frykberg, 2007). Due to the rapid response by law enforcement and the timely manner that they were able to get medical personnel to the victims, all but one of the victims who was alive when officers made entry into the building would survive their wounds. The tactics used by law enforcement on that day at Virginia Tech would later go on to be cited as textbook examples of how first line patrol officers from various agencies could converge in a single location and, with almost no planning phase, utilize commonly taught tactics to aggressively advance on a threat to ultimately save lives (Armstrong & Frykberg, 2007).

Several years later, Adam Lanza would walk into the Sandy Hook Elementary School in Newtown, Connecticut on the morning of December 14, 2012, and shoot and kill 20 students and six faculty members, making this the most deadly "active shooter" event to date. Once again though, this event became a benchmark of success in not

only law enforcement response protocol, but now in civilian active shooter training. In the 12 years between the Columbine High School shooting and the Sandy Hook Elementary School shooting, the Federal Bureau of Investigation (FBI) recorded 140 "active shooter" events around the United States, 33 of which were at schools (Federal Bureau of Investigation, 2017). During this interim, progressive school districts began working with law enforcement to train their educators and students on proper "lockdown" procedures to defend against these active shooters; Sandy Hook is one of these schools.

When Adam Lanza walked into the office of Sandy Hook that morning, his intentions were made very apparent, and the staff was able to get the message to teachers to "lockdown" just before being killed by Lanza. As Lanza made his way through the school, he was forced to bypass several locked doors before finding a classroom that was unable to be secured. Almost all of the children killed that day would be in this one classroom.

Law enforcement officers in Newtown had also received consolidated active shooter training and arrived and made entry into the school only four minutes after the first 911 call was received. One minute later, 12 minutes after the first shot was fired, Lanza saw officers closing in on him and subsequently killed himself (Schultz, Muschert, Dingwall, & Cohen, 2013). The combination of the training law enforcement officers had received and the lockdown protocols established by the school undoubtedly saved lives that day. These three events act as observable benchmarks in the evolution of active shooter/critical incident response; however, the rules would soon change.

In 2016 and then again in 2017, the United States would see the deadliest mass shootings by a single gunman in Orlando, Florida and Las Vegas, Nevada, respectively. On June 12, 2016, a gunman would open fire on a crowd inside of the PULSE nightclub in Orlando, Florida, ultimately killing 49 people and injuring 58. Just over a year later on October 1, 2017 a shooter on the 32nd floor of the Mandalay Bay Resort in Las Vegas, Nevada would engage a crowd of 22,000 people attending a country music festival, killing 58 people and injuring more than 700. Aside from the number of killed and wounded, facets of these shootings presented other differences from the more commonly seen "school shooters."

Both of these shootings were prolonged events, taking hours before law enforcement officials were able to "secure" the scenes. Both were also geographically large in scale and spread over several city blocks or larger, spreading first responder resources thin, and finally, these two events involved an unknown number of assailants and incoming information that would cause officials to believe more suspects existed. (Federal Bureau of Investigation, 2017; Alsup, 2017). These challenges, combined with a lack of communication between emergency medical services and fire departments caused delays in the victims of both events getting needed medical attention in time, inevitably leading to more of the victims succumbing to their wounds. In an effort to save as many lives during critical incident and terrorism response, police departments should begin establishing agreements, protocols, and training with their jurisdiction's emergency medical services, to create fluidly integrated "task forces" that maintain the ability to engage hostiles and adequately treat and rescue wounded persons.

POSITION

In a study conducted in 1996 by Butler and Haggman, it was found that the majority of recorded battlefield deaths fell into three categories; isolated extremity hemorrhage, tension pneumothoraxes, and airway obstruction, with the most significant sample residing in the hemorrhaging group. This study has initiated a shift in how prehospital care is administered following trauma and has since had a profound impact on preventable battlefield casualties, a doctrine known as tactical combat casualty care (TCCC) (Callaway et al., 2011). During the Vietnam War, the case fatality rate (CFR) for preventable battlefield deaths was 14%. After the implementation of TCCC and the education of more of the soldiers on this doctrine, the CFR during Operation Iraqi Freedom and Operation Enduring Freedom dropped to nearly half of the rate seen in Vietnam. Furthermore, in more recent theaters, special operations forces who all have advanced life-saving training recorded no instances of preventable battlefield fatalities during their operations (Callaway et al., 2011). This study and these statistics would conclude that the faster an injured party can get treatment from medically trained personnel, the higher their chances of survival.

In a meeting conducted by the American College of Surgeons in 2013 involving members of the medical community, law enforcement, fire/rescue, emergency medical services (EMS) and military experts, each entity provided input on how to improve survivability factors during mass casualty events. In the event which came to be known as the Hartford Consensus Conference, the panel identified that the "long-standing practices of law enforcement, fire/rescue, and EMS responses are not optimally aligned to maximize victim survival" (Jacobs et al., 2013, p.1399). They further went on to

describe how this issue was exacerbated by the fact that the response of critical incidents like active shooters is primarily delineated and sequential, usually involving law enforcement securing the scene before any rescue operations begin (Jacobs et al., 2013).

Before the assembly of the Hartford Consensus Conference, Minneapolis area officials observed a need for better protocols and collaboration between law enforcement and other responding rescue organizations after the violence and terrorist threats disrupted the 2008 Republican National Convention meeting (Autry et al., 2013). A committee formed by the Metropolitan Medical Response Team (MMRT) comprised of Law Enforcement, Emergency Medical Providers, Fire Department and medical personnel conducted full-scale exercises involving the Minneapolis-St. Paul area emergency services. Before these exercises, MMRT educated first responding personnel on progressive response techniques and the importance of getting medical attention to victims.

Despite this training, in both scenarios the group noted several deficiencies. The law enforcement (LE) group was too focused on threats and possible threats thereby neglecting living victims. Conversely, emergency medical and fire personnel staged well away from the incident and would not approach until the scene was declared fully secure. Ultimately, this resulted in a failure of both LE and rescue command staff to share information which increased the time it took to get treatment to victims (Autrey, Hick, Bramer, Berndt, & Bundt, 2014). While the response was seen as a failure, the positive outcome of the scenarios was that it illustrated a need for a shift in protocols, training, and response tactics. Fortunately, for Minneapolis, they instituted progressive

procedures for correcting the noted deficiencies and only a couple years later were able to put these new practices to the test in a real-world environment.

On September 27, 2012, an employee who was terminated earlier that morning returned to his former workplace, bent on revenge, entered the office building and began shooting other employees. As officers arrived and began searching for the threat, other officers started identifying injured persons and established a safety corridor. When EMS arrived on the scene, they were able to utilize this safety corridor and initiate triage and treatment of the wounded under the protection of officers. This was all done well before the "all clear" was given by officers and resulted in EMS saving several lives that day (Autrey et al, 2014). It is clear by these examples and studies that the current method of allowing police to completely secure a scene before medical services will deploy is too segregated and will only result in delaying treatment to critically injured parties. Conversely, though, it has been shown that more closely and seamlessly integrating these responses will ultimately get victims faster lifesaving treatment.

Citing yet another reason to push toward further resource integration among emergency services, in 2004, the Department of Homeland Security (DHS) developed the National Incident Management System (NIMS) as a way to better prepare the nation for how to handle domestic incidents. The purpose was to establish a standard framework so that agencies from the local level to the federal level could seamlessly integrate utilizing a standardized organizational structure, personnel management paradigm, and official paperwork (Department of Homeland Security, 2008). Another resolution of NIMS was to provide scaffolding under which, police, fire, EMS, and other

rescues and response agencies could synergistically integrate their responses to disasters, terrorist attacks, mass casualty incidents, or pre-planned special events. Within the NIMS structure, task forces are an often used asset during incidents and are defined by DHS as "any combination of resources assembled in support of a specific mission or operational need" (Department of Homeland Security, 2008, p. 67). These task forces differ from other assets used under the NIMS structure in their flexibility; "single resources" and "strike teams" are both comprised of a single type of resources, police officers or firefighters or medical personnel for example. Conversely, task forces, are a conglomerate of multiple types of resources, thus allowing one task force to tackle various roles within an incident (Department of Homeland Security, 2008).

During the PULSE nightclub shooting in Orlando, as officers were arriving on the scene, they were met with hundreds of patrons running out of every exit of the club and in all directions. At the same time, they were continually receiving information about the possible shooter(s), and much of this information was conflicting, increasing the confusion to how to organize and manage an appropriate response properly. Due to the uncertainty of how many shooters were still at large, along with information received about possible secondary improvised explosive devices (IED) still on scene, officers were tasked with extricating wounded outside of the nightclub to a makeshift triage center only 200 feet from the establishment, well within the recommended security perimeter of 1000 feet. It was at this triage center where medics could provide advanced life-saving measures to the wounded and prepare them for transport to the local hospital. The "golden hour" is widely regarded as the standard time frame that a critically wounded victim must reach a proper medical facility (hospital) to greatly

increase their chances of survival. Due to the model utilized in Orlando, all of the wounded still alive when officers arrived to evacuate them were transported to the local emergency room within 40 minutes of the initial shooting. As such, 58 of the 69 victims removed from the club survived their injuries (Department of Justice, 2017).

The model used in Orlando was a direct testament of how interdisciplinary task forces can be safely deployed inside of an area that has not been deemed entirely secure by law enforcement, and how the method of their operation directly attributed to the survival of many of the victims. If officers had been forced to extricate wounded completely outside of the security perimeter to the staging area, it would have meant moving injured five times as far, over ten city blocks, taking an unreasonable amount of time which would have cost far more lives.

A year later in 2017, during the shooting at a Las Vegas festival where 58 people were killed and over 700 were injured by a shooter from the 32nd floor of the Mandalay Bay Resort, the same model was utilized during the initial response (Alsup, 2017). As officers began searching for and engaging the threat, combined task forces began establishing triage centers and casualty collection points well within proverbial "ground zero." This incident was a case where officials were unable to readily establish a consolidated security perimeter due to the scale of the event. Directly following the event, 911 calls also led law enforcement officials to believe there may have been more than one shooter. Task forces combined of law enforcement officers as well as medical personnel were then sent to reported locations of additional wounded that had escaped the immediate vicinity as well as reports of other possible shootings occurring nearby (Las Vegas Metropolitan Police Department, 2018). The development of sending these

combined assets to remote locations allowed commanders to deploy a single resource to a report of wounded with the ability to negotiate most obstacles and resolve the situation; negating the need to pull further resources from the primary scene.

COUNTER ARGUMENTS

The traditional method utilized by most jurisdictions when responding to an injured party that may not be in a safe area generally involves the EMS unit staging in a safe area away from the target location until police can secure the scene. This model has been conventionally used in typical day to day responses as well as during critical incidents. This paradigm is based on the fact that a vast majority of medical personnel, whether embedded with law enforcement or activating in a separate capacity are unarmed non-combatants, which significantly decreases their ability to defend themselves should they be attacked (Kaplan et al, 2012). Keeping the response segregated and sequential assures that these unarmed non-combatants are entering a safe area to provide treatment to wounded individuals.

In the case of any violent encounter, responding personnel should identify and communicate "hot, warm, and cool zones" (Pennardt & Schwartz, 2014). Hot zones are areas that contain a direct and immediate threat; warm zones are areas where potential threats may exist but there is no immediately known threat, and cold zones are areas where there is no reason to believe a threat would exist. Very little medical care can be provided in a hot zone under direct threat conditions and is generally relegated to moving a victim to a covered position and further attempting to neutralize the threat.

There is no disputing that unarmed medical personnel does not belong in the hot zone; however, according to TCCC doctrine, the majority of pre-hospital care provided

to a wounded patient should be done in the warm zone to assure that the victim can receive advanced life-saving measures as early as possible. While law enforcement cannot completely designate a warm zone as "safe", (which is the reason it is still designated as a warm zone and not a cold zone), un-armed medical personnel can still operate in relative safety under the protection of police officers or other security personnel (Pennardt & Schwartz, 2014).

In a survey given to 256 emergency medical service medical providers, 89% felt that they were prepared to respond to an active shooter incident to provide medical care after being trained to respond to such, up from 41% before they received such training (Jones, Kue, Mitchell, & Eblan, 2014). Furthermore, over half of those surveyed, 56%, felt comfortable enough to enter a building with an active shooter, un-armed, to provide medical treatment to victims. This statistic rose drastically among those with prior military experience to 78% (Jones et al., 2014). This study indicates that the majority of trained EMS personnel are willing to enter hot zones to provide treatment, which suggests that a much higher percentage would feel comfortable in their level of training to operate in warm zones efficiently.

Emergency medical personnel are not the only ones to train to operate jointly during critical incidents. The majority of law enforcement active shooter response curriculum includes how to move through warm and possible hot zones while safely escorting teams of unarmed persons. Though the use of specific formations and tactics, combined task forces are trained to not only move safely from point to point, but also how to establish casualty collection points (CCPs) and more importantly, how to

defend those areas while medical personnel triage and treat wounded (Blair et al., 2013).

Another argument against an integrated response deals with one of the lessons learned from the Columbine High School shooting. As mentioned before, the pendulum swing that occurred after Columbine drove law enforcement all over the nation to broaden the scope of training that first line officers would receive, thus giving them the ability to respond to a more inclusive breadth of incidents. An outcome of this increase in training disciplines was the adoption of the Tactical Combat Casualty Care (TCCC) program employed by the U.S. military into the law enforcement community. Due to its immense success overseas during Operation Iraqi Freedom and Operation Enduring Freedom, many officers and entire departments received training on how to provide initial treatment to battlefield injuries, most common of which was gunshot wounds. It would subsequently stand to reason that it is more useful to train all law enforcement officers to treat injuries that they are most likely to encounter during active shooters and critical incidents, giving them the ability to treat wounded and defend themselves and others (Callaway et al., 2011).

Many believe that TCCC was instituted so that law enforcement officers could provide medical treatment to wounded victims in the cases of mass causality events, when in fact, tactical medicine was never truly intended to be utilized for wounded third parties. The primary goal of TCCC was to give trained personnel the ability to treat themselves or other first responders so that they may continue the mission. Officers generally only carry enough equipment into an incident to treat themselves and are taught during the TCCC program that their issued individual first aid kit (IFAK) is used to

treat themselves. The fundamental basis of tactical medicine is that medical priorities will almost always fall behind the primary law enforcement mission unless proper medical personnel is present to facilitate a shift in mission parameters (Tang & Kelen, 2007).

Taking the argument a step further, some agencies may explore the option of expanding the medical training of their law enforcement officers to certify them as full paramedics. As state certified paramedics, they would then retain the ability to intubate patients, start intravenous fluid delivery, administer certain medications and conduct many other advanced life-saving measures. While this option would indeed expand their overall response capability, the training necessary to certify an officer as a paramedic is quite extensive.

In the state of Texas, the Department of Health and Human Services certifies paramedics and according to chapter 157 of the Texas Administrative Code (1999), an individual must undergo a minimum of 1,000 hours of training to be certified as a paramedic. This regulation subsequently means that every officer an agency would want to become certified as a paramedic would have to be gone from the department for a minimum of six months while they attended a certification program. Most departments would be unable to account for the absence this creates and absorb the cost to send enough of their officers through this program to be a practical solution.

RECOMMENDATION

It is clear that the active shooter and terrorist threat will continue to plague the United States for the foreseeable future. While the evolution of law enforcement has been proven over the past two decades to better address the growing threat, this

progression will only need to continue to assure they can protect the nation's people from a new breed of domestic terrorists. Recent events like the PULSE nightclub shooting in Orlando and the Mandalay Bay shooting in Las Vegas have demonstrated that a fluidly-integrated response by law enforcement and emergency medical personnel can greatly affect the case fatality rate of a large scale critical incident and can, most importantly, be done in a manner that is safe for first responders.

The initial goal of law enforcement at any active shooter or critical incident is, and should be, the rapid neutralization of the threat; to "stop the killing" in an effort to save as many lives as possible. This overarching principle, however, is not only achieved by preventing further violence but by expeditiously providing advanced life-saving measures to critically wounded victims, a fundamental message of the Hartford Consensus Conference (Jacobs et al., 2013). The veracity of this tenant has been illustrated in events all over the nation including Virginia Tech, Minneapolis, and Orlando and has directly attributed to the success of the medical mission during those incidents. The integrated response model has also proved to be a much more efficient construct during critical incidents, chiefly during large scale or mass casualty events that may involve hundreds of wounded or may be spread among several city blocks. The NIMS "task force" approach to incident resolution allows for a much more efficient delineation of responsibility and removes the traditionally segregated and sequential response, thus increasing the efficiency and effectiveness of the overall operation (Kaplan et al., 2012).

Being progressive in the theater of public safety does not come without risks. Part of being on the leading edge of this field generally means pushing the boundaries

of what some traditional practitioners would consider safe. Integrating un-armed medical personnel into law enforcement led task forces penetrating into areas that could potentially contain threats is counter-intuitive to most current operating procedures. This tactic, however, has proved both useful and safe when appropriately employed. Through comprehensive training of both law enforcement personnel and emergency medical personnel, officers learn effective strategies to protect un-armed persons, and medical personnel gains the confidence to effectively operate in warm zones during active shooter incidents (Jones et al., 2013).

Opponents of the integration of services would also argue that law enforcement officers with basic lifesaving training through programs such as Tactical Combat Casualty Care, should maintain the ability to provide all necessary medical services during active shooter and terrorist incidents until the proverbial "all clear" can be announced. This philosophy, however, can be quickly unraveled with a closer look at the TCCC program as it focuses its training almost entirely on the medical treatment of the officer or first responder, not injured third parties (Tank & Kelen, 2007).

In the previous two years, this nation has witnessed the two deadliest active shooter events in its history, events whose death toll and wounded can only be rivaled by the terrorist attacks of 9/11. These events though, sparked an evolutionary leap in how law enforcement, EMS, and fire/rescue can work together in a manner previously believed to be unsafe and reckless to save countless lives. This development is only in its infancy though, and the public safety community must continue to aggressively fan the flames of urgency to assure that a prototypical response tactic becomes the basis for established, adopted doctrine across the nation. The public safety agencies in the

Minneapolis-St. Paul area has demonstrated that a pragmatic approach to adopting this new paradigm can be operationally effective after they initiated both "table-top" style discussions involving police, EMS, fire/rescue, and medical personnel in response to violent encounters and terrorist threats following the 2008 Republican National Convention. These table-tops subsequently led to full-scale exercises involving members from all responding agencies, and while these exercises unveiled a clear lack of training and communication, the involved agencies were able to educate and re-train their personnel accordingly. These efforts quickly paid dividends when Minneapolis was faced with its own active shooter in 2012. Responding agencies were accredited with saving the lives of several of the wounded due to new response tactics that involved an integrated response and injecting emergency medical personnel into a warm zone to provide advanced life-saving measures to the victims (Autry et al., 2013).

Using the Minneapolis model as a primer, jurisdictions need to begin assessing their resources and initiating conversations among their emergency service branches about their level of readiness. These conversations should then evolve into a series of "table-top" discussions utilizing historical data and events to further focus and refine response practices. From there, these entities should begin establishing procedures and memorandums of understanding (MOU) that outline specific protocols that will be followed by line personnel who should then be successively educated and trained on such. This training must involve as many people as possible, be reality-based, and be continued to assure its effectiveness. In the past two decades, this nation's public safety community has reluctantly but fully accepted that it is not a matter of if these events are going to occur but when. It is now time to shift that archetype once again.

The community no longer has the luxury to ponder what they will do when an incident occurs but instead must focus their efforts on how they will prevail.

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