

Developing an Active Shooter Incident Response Policy
for the Rogers Fire Department

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CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriated credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: _____

Abstract

Over the last several years active shooter events have become more common in the United States. These incidents have occurred in a wide variety of locations and across a wide range of demographic groups. The problem was the Rogers Fire Department did not have a policy for dealing with an active shooter incident. The purpose of this applied research project was to develop an active shooter incident response policy for the Rogers Fire Department. The action research method was utilized to develop an active shooter incident response policy by answering the following four research questions: (a) What tactics do fire, EMS, and other industry guiding bodies recommend be utilized at active shooter incidents?, (b) What tactics do other fire and EMS agencies in the United States utilize at active shooter incidents?, (c) What patient care strategies do fire, EMS, and other industry guiding bodies recommend be utilized at active shooter incidents?, and (d) What patient care strategies do other fire and EMS agencies in the United States utilize at active shooter incidents? In order to answer the research questions an in-depth review was performed of the published literature of guiding bodies that deal with providing medical care under conditions that include ballistic and explosive threats along with an evaluation of the active shooter response protocols of various fire and emergency medical agencies in the United States. The results showed widespread agreement of the necessity for response agencies to be prepared to provide medical care under combat-like circumstances. Additionally, in order to have the greatest impact, medical personnel should focus on treating life-threatening hemorrhage and breathing problems. The recommendations based on the research included developing an active shooter response policy that allows medical personnel to provide point-of-wounding care to victims while operating under the protection of law enforcement.

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Developing an Active Shooter Incident Response Policy for the Rogers Fire Department

The government of the United States has defined an active shooter as an individual actively engaged in killing or attempting to kill people in a confined and populated area (Federal Bureau of Investigations, 2014). Between the years 2000 and 2013 there were 160 incidents in the United States that met this U.S. government recognized definition of an active shooter incident. As a result of these incidents there were 1,043 casualties, including 486 persons killed and 557 persons wounded (Blair & Schweit, 2014). These active shooter incidents have occurred in communities both large and small across the country and it seems that no area is immune from the potential of experiencing an active shooter incident.

In order to respond to active shooter incidents in a safe and effective manner it is imperative that all emergency response agencies develop a complete and concise policy that provides the details of a proper active shooter incident response plan. The problem was the Rogers Fire Department did not have a policy for dealing with an active shooter incident. The purpose of this applied research project was to develop an active shooter incident response policy for the Rogers Fire Department.

The action research method was utilized to develop an active shooter incident response policy by answering the following four research questions: (a) What tactics do fire, EMS, and other industry guiding bodies recommend be utilized at active shooter incidents?, (b) What tactics do other fire and EMS agencies in the United States utilize at active shooter incidents?, (c) What patient care strategies do fire, EMS, and other industry guiding bodies recommend be utilized at active shooter incidents?, and (d) What patient care strategies do other fire and EMS agencies in the United States utilize at active shooter incidents?

Background and Significance

The city of Rogers is located in the extreme northwest corner of the state of Arkansas in Benton County. Rogers is the largest city located in Benton County and has a current estimated population of 60,112 (U.S. Census Bureau, 2014). Due to the large number of businesses, industrial facilities, and schools that are located within the city of Rogers, the estimated daytime population of Rogers rises to in excess of 100,000.

The Rogers Fire Department is charged with providing a wide range of emergency response functions within the city limits of Rogers including fire suppression activities, hazardous materials response, technical rescue response, and emergency medical services. The department meets these demands by employing 117 career firefighters who are also cross-trained as emergency medical technicians and paramedics. The fire department responds to emergencies from seven fire stations that are located throughout the city and staffs five engine companies, two ladder companies, a heavy rescue company, and four advanced life support transport ambulances on a daily basis.

The personnel of the Rogers Fire Department have significant experience responding to and handling emergency medical incidents, including those involving traumatic injuries. In 2013 the fire department treated 4,549 individual patients at emergency medical incidents (Rogers Fire Department, 2014). Additionally, the Rogers Fire Department has a detailed mass casualty incident response policy that spells-out the proper procedures for efficiently triaging and treating large numbers of patients (Rogers Fire Department, 2011). Department personnel regularly review and drill on the mass casualty incident policy. Despite the experience and ability of the personnel the department did not have a policy that adequately dealt with accessing and treating the victims of an active shooter.

Emergency response agencies across the United States have been forced to deal with the sudden aftermath of an active shooter incident at an alarmingly increasing rate in the last few years. According to a fourteen year study conducted by the Federal Bureau of Investigations and Texas State University that covered the years 2000 through 2013, there were 16.4 active shooter incidents annually during the last seven years of the study. This was a dramatic increase from the first seven years of the study in which there were only 6.4 active shooter incidents annually (Blair & Schweit, 2014).

It appears from the data that no part of the country is exempt from the threat of an active shooter incident, as the data indicates that these types of incidents have been reported in 40 of the 50 states and the District of Columbia (Blair & Schweit, 2014). Of additional concern is the fact that active shooter incidents often occur in small/medium sized communities with limited public safety resources and budgets (Fabbri, 2014).

Although some of the most high-profile active shooter incidents have occurred at educational facilities, school shootings only account for 29% of all active shooter incidents. Studies have shown that the greatest number of active shooter incidents (40%) occur in business occupancies such as retail stores, office buildings, factories, and warehouses. The remainder of active shooter incidents either occurred outdoors (19%) or in miscellaneous occupancy types (12%) (Blair, Martindale, & Nichols, 2014).

The violent phase of most active shooter incidents is typically over in a relatively short amount of time, with the mean time for such events hovering around 12 minutes (Fabbri, 2014). Of additional interest is the fact that most active shooter incidents involve only one perpetrator. One study of 160 active shooter incidents that occurred in the United States revealed that all but two of the incidents involved a single shooter (Blair & Schweit, 2014). Despite the fact that the

typical active shooter incident involves only one shooter and is short in duration the effects can be astonishing in the number of casualties that are inflicted. The median number of casualties that occur at active shooter incidents is five, however, at least one incident occurred in which 70 persons were killed or wounded (Blair, Martindale, & Nichols, 2014). Even as few as five seriously injured patients who are located in an area that may still be occupied by an armed assailant will create access and treatment problems for the vast majority of EMS agencies.

It is also important to understand the types of weapons that are used and the types of injuries that are sustained at the typical active shooter incident. In 60 percent of active shooter incidents the most powerful weapon that was utilized by the perpetrator was a handgun. In 27 percent of the incidents a rifle was used and 9 percent of the time a shotgun was used. Additionally, at least one improvised explosive device (IED) was in the possession of the perpetrator at 2 percent of the incidents (Police Executive Research Forum, 2014).

According to the Federal Emergency Management Agency (FEMA) the most common fatal injuries from ballistic and explosive wounding include major hemorrhage, tension pneumothorax, and airway obstruction (2014). Based on the type of weapons that have been utilized by perpetrators at active shooter incidents it is apparent that emergency medical responders should anticipate encountering large numbers of traumatic injuries and should have sufficient supplies and knowledge to deal with these types of injuries.

The city of Rogers has a large number of occupancies located within the city boundaries that meet the criteria for potential settings for an active shooter incident. There are 22 public schools located within the city, including four middle schools and three high schools, which serve more than 14,800 students (Rogers Public Schools, 2014). In addition to the public schools, there are numerous private schools of various sizes located within the city. Also located

within the city are a large number of major businesses and assembly occupancies, including an outdoor music venue, multiple restaurants, two large movie theater complexes, several large office buildings, and a large shopping mall.

Based on the past history of active shooter incidents across the country and the potential for one to occur within the city of Rogers it is apparent that the Rogers Fire Department must develop a standard operating procedure that will guide personnel in responding to and mitigating one of these incidents should it ever occur.

The research topic of this Applied Research Project meets the Executive Fire Officer Program goal “to transform fire and emergency services organizations from being reactive to proactive, with an emphasis on leadership development, prevention, and risk reduction” (U.S. Fire Administration, 2013, p. I-4). This Applied Research Project also relates to the curriculum of the National Fire Academy’s Executive Analysis of Community Risk Reduction course in that it involves identifying a potential hazard to the community and developing a plan to reduce the effects of that hazard (U.S. Fire Administration, 2013, p. 2-4).

The purpose of this Applied Research Project meets the United States Fire Administration’s Strategic Framework Goal 2 of improving local planning and preparedness and Strategic Framework Goal 3 of improving the fire and emergency services’ capability for response to and recovery from all hazards (U.S. Fire Administration, 2009, p. 14) in that it seeks to develop a procedure that will prepare the Rogers Fire Department to reduce the impact to members of the community when an active shooter incident occurs. In addition, this research will assist the Rogers Fire Department in meeting the United States Fire Administration Strategic Initiative of preparing for and responding to all risks within the community (U.S. Fire Administration, 2009, p. 15).

Literature Review

A comprehensive literature review was performed in order to determine what published information was available from outside sources that addressed the research topic. The literature review specifically focused on identifying any studies or documents that adequately answered the four research questions. The first research question was addressed by performing an investigation into the tactical approach to active shooter incidents that fire, EMS, law enforcement, and military guiding bodies recommend. The second research question was addressed by seeking out published documentation of the tactical approach that other fire and emergency medical service agencies were taking at active shooter incidents in the United States. The third research question was addressed by reviewing any available literature on the patient care strategies that have been recommended by fire, emergency medical, law enforcement, or military guiding bodies. The fourth research question was addressed by reviewing published material on the patient care strategies utilized by other fire and emergency medical service agencies at active shooter incidents in the United States.

The military has a long history of providing combat rescue and medical care to wounded soldiers. One of the first documented instances of this occurred when the Union Army deployed an ambulance corps under the supervision of surgeon Jonathan Letterman at the Battle of Antietam during the Civil War (Callaway & Smith, 2014). Although, this group provided care to those who had suffered battlefield injuries, the care was often not rendered until quite some time after the injuries had occurred. In the modern United States military it is standard practice to deploy a medic with any unit that might come under fire (Strauss, 2014). These combat medics are specifically trained to provide point-of-wounding care to soldiers.

Through the years there has been an increased emphasis placed on providing medical care to wounded soldiers as rapidly as possible. The current goal within the United States military is to place medical care at the patient's side within a few seconds to minutes of wounding (Smith & Delaney, 2013). The deployment of combat medics in this manner has had the effect of continuing to reduce the mortality rate of United States soldiers who are wounded in combat. During the Vietnam War 24 percent of soldiers that were wounded did not survive their injuries; however the combat mortality rate of wounded United States soldiers decreased to 10 percent during the Iraq war (Connolly, 2004).

In order to protect combat medics while they are performing their life-saving functions it is necessary for them to wear the same ballistic protective equipment that the ordinary soldier wears, including a helmet and flak jacket (Szoldra, 2014). According to Dr. Simon Yu, a highly trained combat medic who is properly equipped in this manner and able to provide rapid medical care is critical to the survival of those soldiers suffering from ballistic injuries (2014).

Many law enforcement tactical units that regularly engage in high-risk duties in which they are at increased risk of encountering armed suspects have recognized the value of having medical personnel close at-hand to provide rapid care should a member of the unit be injured. In fact, tactical medics now accompany tactical units on virtually all high-risk missions and training (Schreiber, 2009).

As a result of the raid on the Branch Davidian compound in Waco, Texas in 1993 the Bureau of Alcohol, Tobacco, and Firearms (BATF) recognized the need to provide rapid medical care to personnel who suffered ballistic injuries in the line-of-duty. Shortly after the incident the BATF implemented a tactical medic program which now includes 70 special agents who are also certified as EMTs or paramedics (Clinton, 2013).

The International Association of Chiefs of Police (IACP) has formally recognized the benefit of placing medically trained personnel in the field to provide immediate care to law enforcement officers who are injured in the line-of-duty. According to the IACP, evidence suggests that this type of medical aid can improve officer survival (McArdle, 2012). Most law enforcement agencies that utilize tactical medics have recognized the need to provide the medics with the same type and level of ballistic protection that the typical members receive. According to French (2013), before thinking about medical gear the medic should first be equipped in the same protective gear that other officers utilize.

Due to their frequency and the impact that active shooter events have had across the country many fire and emergency medical service guiding bodies have chosen to formally address the topic. The United States Fire Administration (USFA) has taken the position that it is essential that local policies be put in place before active shooter/mass casualty incidents happen in order to ensure that these types of incidents are handled in an efficient manner. According to the USFA, active shooter incidents should be handled by means of a unified command system that includes representatives of law enforcement, fire, and emergency medical services. Additionally, the USFA document recommends that consideration be given to the deployment of armored medical personnel, escorted by law enforcement officers, who are capable of providing point-of-wounding care to those victims of an active shooter (U.S. Fire Administration, 2013).

The Urban Fire Forum (UFF) is organized by the National Fire Protection Association and is comprised of fire chiefs from metropolitan fire departments in the United States, Canada, and the United Kingdom. The Urban Fire Forum has agreed with the United States Fire Administration's position on active shooter incidents. They have stated that local fire and police departments should have a common approach to active shooter incidents and that they work

within a unified command system. The UFF goes on to say that medical personnel should be equipped with ballistic protective equipment, to include a Kevlar helmet and body armor, and should provide medical care to patients in areas of indirect threat, acting under the security provided by law enforcement personnel (Urban Fire Forum, 2013).

The International Association of Fire Chiefs (IAFC) is a professional organization that represents fire service leaders from all over the world. Due to the proliferation of active shooter events across the country the IAFC has taken the stance that the fire service must be proactive and all fire departments should incorporate active shooter training into their curriculum (Rogers, 2013). In 2013 the IAFC issued a position statement on active shooter events which states that all local fire agencies should adopt an active shooter policy that includes the following components: use of the National Incident Management System, training with law enforcement, common communications terminology, ballistic protective equipment, consideration of secondary devices, and consideration of fire hazards (International Association of Fire Chiefs, 2013).

The International Association of Firefighters (IAFF) represents more than 300,000 full-time firefighters and paramedics who protect more than 85 percent of the population in communities in the United States and Canada. In 2013 the IAFF published a position statement on active shooter events. The position statement contained a number of recommendations for agencies responding to an active shooter event including the use of the National Incident Management System, use of a nationally accepted response standard, use of the Rescue Task Force (RTF) concept, use of appropriate ballistic protective equipment, training with law enforcement, and use of common communications terminology (International Association of Firefighters, 2013).

In April of 2013 representatives of law enforcement, fire, pre-hospital care, trauma care, and the military met in Hartford, Connecticut to develop a consensus regarding strategies that would help increase the survivability of victims of active shooter events. This meeting became known as the Hartford Consensus. The recommendations that came from the Hartford Consensus included law enforcement and medical personnel working together to provide medical care to injured patients earlier than has been historically seen at active shooter events (Joint Committee to Create a National Policy to Enhance Survivability from Mass Casualty Shooting Events, 2013).

Several fire departments across the country have developed formal response policies that are designed to guide the operations of their personnel at active shooter events. The Arlington (VA) County Fire Department was an early pioneer in the concept of utilizing fire and emergency medical service personnel to locate and treat victims early in an active shooter event. In 2009 the department developed a policy that allowed medically trained personnel to enter into secured areas, labeled “warm zones,” of an active shooter scene to begin providing care. These personnel are grouped into a Rescue Task Force (RTF) that consisted of two paramedics and two police officers. An RTF is responsible for moving rapidly through the warm zone to locate victims and provide life-saving interventions. Although a unified command system is utilized, the fire and police members of each RTF operate on different radio channels in order to ensure safe movement within a structure while still being able to report the numbers and statuses of patients that are encountered. The medical personnel assigned to an RTF are required to wear ballistic protective equipment (Arlington County Fire Department, 2012).

In 2013 the Los Angeles Fire Department released a training bulletin that specified the procedures to be used by the department in the event of an active shooter incident. The LAFD

procedures stipulate that they will work within a unified command system along with law enforcement and divide the incident into operating zones based on the level of threat present in each area. Much like the Arlington County Fire Department the LAFD deploys medical personnel into the active shooter scene along with law enforcement officers in what is labeled a Rescue Task Force (RTF), in order to locate and treat victims in areas where there is an ongoing ballistic or explosive threat. However, the LAFD training bulletin does not stipulate that the medical personnel be provided any type of ballistic protective equipment while operating as a member of an RTF (Los Angeles Fire Department, 2013).

The Hillsboro, Oregon Fire Department has worked cooperatively with their local law enforcement agency to develop an active shooter response protocol. Their approach involves medical personnel being escorted by armed law enforcement officers into a casualty collection point (CCP). Additionally, law enforcement officers are responsible for locating victims and moving them to the CCP where they are triaged by the medical personnel. The Hillsboro Fire Department does not mandate that their medical personnel wear ballistic protective equipment while operating at an active shooter scene (Force Science Institute, 2013).

The Oak Creek (WI) Fire Department has a policy regarding tactical mass casualty response incidents. The fire department's procedure is to work within a unified command system and to deploy personnel as part of an Injury Rescue Team (IRT) in order to locate victims and provide rapid treatment and evacuation. Each member of an IRT is required to be equipped with a ballistic vest, a Kevlar helmet, treatment bags, a flashlight, a radio, and exam gloves (Pulvermacher, 2013).

Much like the other departments that were evaluated for this project the Manchester Fire, Rescue, EMS Department in Manchester, Connecticut has developed a policy that calls for

medically trained personnel to be placed into a warm zone to treat victims. The personnel function as members of a “Rescue Team” under the protection of law enforcement personnel. A unified command is established and personnel participating on a Rescue Team must wear a ballistic vest and helmet (Billings, 2014).

In the early 1970s the United States military completed a study of the battlefield deaths that had occurred during the Vietnam War. This study, known as the Wound Data and Munitions Effectiveness Team (WDMET) study, found that approximately 15 percent of battlefield deaths were attributable to exsanguination from an extremity wound, tension pneumothorax, and airway obstruction. The WDMET study concluded that these deaths were preventable with basic interventions if applied soon after the wound occurred. The study emphasized the importance of forward medical care (Callaway & Smith, 2014). Currently it is common practice in the United States military to assign medics who are capable of controlling bleeding and clearing airways to all combat units (Strauss, 2014).

In order to address combat induced bleeding the average combat medic in the United Kingdom carries hemostatic gauze, field dressings, and tourniquets. For patients suffering from difficulty breathing the medic carries chest seals, nasopharyngeal airways, oropharyngeal airways, and syringes to perform needle chest decompressions (Szoldra, 2014).

United States Army Ranger medics carry a wide variety of medical supplies that are designed specifically to treat patients who are experiencing major blood loss and breathing issue. Among the items that the medics carry to control bleeding are tourniquets, trauma dressings, hemostatic dressings, kerlix, and compression dressings. The items carried to treat breathing issues include chest seals, nasopharyngeal airways, a cricothyroidotomy kit, a King airway, a hand-held suction, and a bag-valve-mask (Montgomery & Kotwal, 2011).

The United States Bureau of Alcohol, Tobacco, and Firearms (BATF) tactical medics utilize a version of the military Tactical Combat Casualty Care guidelines that they have adapted for law enforcement. The primary focus of the BATF medical personnel is to stop life-threatening bleeding with a tourniquet and moving the wounded officer to a safe position (Clinton, 2013).

Many law enforcement tactical experts recommend carrying an assortment of medical supplies that are focused on dealing with the types of injuries that tactical teams are likely to encounter. Specifically, the supplies carried by tactical medics revolve around stopping major bleeding and breathing difficulties (Heiskell & Olesnick, 2006). Some of the recommended supplies for tactical medics include tourniquets, compression dressings, bag mask, surgical airway kit, needles for chest decompression, and chest seals (French, 2013).

In 2010 the Committee for Tactical Emergency Casualty Care was formed in order to translate the lessons that had been learned in the treatment of military combat casualties into the civilian setting. The committee was made up of representatives from the fire service, the emergency medical service, law enforcement, the military, and physicians from emergency departments and trauma centers. The committee developed a set of best practice treatment guidelines that came to be known as Tactical Emergency Casualty Care (TECC). The TECC guidelines were designed to specifically take into consideration the unique challenges that are faced during civilian tactical situations (Committee for Tactical Emergency Casualty Care, 2014).

There are several recommendations made in the Tactical Emergency Casualty Care (TECC) guidelines that relate directly to the development of an active shooter response policy for local responders. First, the TECC guidelines stress the importance of controlling major

hemorrhage through the use of tourniquets, pressure dressings, and hemostatic dressings.

Second, the TECC guidelines point out the need for addressing life-threatening breathing issues, specifically tension pneumothorax. Finally, the TECC guidelines focus on the need to rapidly evacuate serious patients so that they can receive definitive medical treatment (Callaway et al., 2011).

The 2013 Hartford Consensus continued the trend toward rapid treatment and extrication of those persons injured in an active shooter event. The group developed the acronym “THREAT” to assist organizations in prioritizing their activities when confronted with an active shooter or intentional mass casualty event. The THREAT acronym stands for threat suppression, hemorrhage control, rapid extrication to safety, assessment by medical providers, and transport to definitive care. The group specifically recommended that emergency medical providers be trained in the use of tourniquets, pressure dressings, and hemostatic dressings (Joint Committee to Create a National Policy to Enhance Survivability From Mass Casualty Shooting Events, 2013).

In 2013 the United States Fire Administration (USFA) released a guide for fire and emergency medical services when dealing with an active shooter or mass casualty incident. The guide recognized the priorities established within the THREAT acronym that was developed by the Hartford Consensus as being appropriate for active shooter events. Within this document the USFA expressed the opinion that the concepts of Tactical Emergency Casualty Care were valid and that response agencies should focus on hemorrhage control techniques and assessment, triage, and transport of victims with lethal internal hemorrhage and torso trauma to definitive care. Additionally, the USFA stressed the importance of the forward deployment of medical equipment in order to provide point-of-wounding care (U.S. Fire Administration, 2013).

The International Association of Fire Chiefs Urban Fire Forum released a position statement in 2013 that recommended that emergency medical agencies should treat the injured patients at an active shooter event according to the standards established in the Tactical Emergency Casualty Care guidelines. Some other recommendations made by the Urban Fire Forum included having forward medical providers direct those patients who could ambulate without assistance to self-evacuate down a cleared corridor under police direction and utilizing a marking system to identify those victim who were dead in order to avoid repeated evaluations by Rescue Task Force (RTF) team. It was also stated by the Urban Fire Forum that RTF teams can be deployed to complete a number of functions, such as victim treatment, victim removal from the warm zone to the cold zone, and movement of supplies from the cold zone to the warm zone (Urban Fire Forum, 2013).

The International Association of Fire Chiefs (IAFC) recommends that medical personnel follow the guidelines established in the Tactical Emergency Casualty Care protocols. Additionally, the IAFC has recommended that agencies utilize the Rescue Task Force (RTF) concept and focus of rapid treatment of life-threatening injuries and rapid evacuation (International Association of Fire Chiefs, 2013).

The International Association of Firefighters (IAFF) position statement stressed the importance of deploying medical personnel as part of a Rescue Task Force (RTF) to provide point of wound care to victims where there is an on-going ballistic or explosive threat. The IAFF recommends that the RTF include at least one Advance Life Support provider and states that the RTF should treat, stabilize, and remove the injured in a rapid manner (International Association of Firefighters, 2013).

The Arlington County (VA) Fire Department (ACFD) initially developed their active shooter response policy in 2009 with the express goal of getting medical resources to the patient's side within minutes of being wounded while continuing to provide for the safety of responders (Smith, Iselin, & McKay, 2009). Utilizing the Rescue Task Force (RTF) concept the ACFD policy focuses on treating major hemorrhages and breathing problems; they meet this goal by carrying the following medical supplies: tourniquets, chest seals, hemostatic granules, decompression needles, nasopharyngeal airways, King airways, pressure bandages, and gauze (Arlington County Fire Department, 2012). In order to treat the most patients the ACFD has the initial RTF teams move deep inside a structure to stabilize as many patients as their supplies can handle before they begin evacuating the injured. As additional resources arrive follow-up RTF teams are deployed to begin evacuating those patients who were stabilized by the initial teams (Smith et al., 2009).

The Los Angeles Fire Department (LAFD) has formally adopted the concepts developed by the Hartford Consensus and utilizes the THREAT acronym to prioritize their scene activities. The LAFD deploys personnel with medical supplies focused on treating major hemorrhages and breathing problems. LAFD personnel are deployed as Rescue Task Force (RTF) teams, much like the Arlington County Fire Department, to treat and stabilize patients until they exhaust their supplies, at which point they begin the evacuation of victims (Los Angeles Fire Department, 2013).

The policy of the Oak Creek (WI) Fire Department (OCFD) is to deploy an Injury Rescue Team (IRT) into areas where victims are located in order to treat them according to the Tactical Emergency Casualty Care (TECC) guidelines. The IRT is expected to treat as many victims as possible with the medical supplies that they carry and then begin evacuation once their medical

supplies are exhausted. Additional IRTs can be deployed to continue locating and treating victims or begin evacuating victims that have been stabilized. Like other agencies reviewed for this project the OCFD encourages those victims who can ambulate without assistance to self-evacuate (Pulvermacher, 2013).

The Manchester (CT) Fire, Rescue, EMS Department (MFRE) policy on active shooter events varies somewhat in the approach that is taken to treating and evacuating the victims of active shooters. The MFRE utilizes Rescue Teams to move into the warm zone and treat life-threatening injuries and then immediately move those victims to a casualty collection point (CCP) that is also located in the warm zone. Additional Rescue Teams may be deployed to begin searching for victims where the initial Rescue Team left off. The MFRE follows the treatment guidelines established by Tactical Emergency Casualty Care (Billings, 2014).

Based on the literature that was reviewed for this project it appears that there is widespread agreement on the need for fire and emergency medical responders to develop a formal policy that addresses active shooter events. All of the guiding bodies from the military, law enforcement, fire, and emergency medical services that this researcher reviewed agreed that providing point-of-wounding care to those patients suffering from ballistic injuries as soon after the wounding as possible was critical in order to have the greatest life-saving impact. Additionally, those fire and emergency medical services whose active shooter policies were reviewed for this project mandated the aggressive treatment of victims by personnel operating in an area not far removed from the hot zone. It became clear to this researcher that a comprehensive active shooter incident response policy, that placed care rapidly at a victim's side while providing a reasonable level of protection for the responders, should be adopted by the Rogers Fire Department.

Procedures

In order to answer the four research questions that were developed to solve the problem that was identified in this applied research project at the Rogers Fire Department this researcher utilized the action method of research.

The first research question (What tactics do fire, EMS, and other industry guiding bodies recommend be utilized at active shooter incidents?), was answered by performing an extensive review of the existing literature that pertains to guidelines and current best-practices for active shooter events. Due to the extensive experience that the United States military has had in treating battlefield injuries under continuing enemy fire the first step was to review the practices and tactics that the military had developed. The literature review was begun by reviewing the available published material that existed on how the military has adapted to dealing with the wounds that are caused by ballistic and explosive devices.

A review of the historical development of battlefield medicine by the United States military was performed in order to develop an understanding of the origins and evolution of the tactics that have been utilized to provide care to those soldiers who are wounded in combat. This review included evaluating the survival rates of wounded soldiers as combat medicine has evolved and become more readily available and determining if the presence of rapid medical care had significantly impacted those rates.

A review of military publications was performed in order to determine how the military has gone about making battlefield medical treatment more readily accessible and how medical personnel are protected while engaged in delivering the treatment.

Law enforcement agencies in the United States have recognized the need for providing medical care under combat-like situations; due to this fact, this researcher reviewed published

materials that documented the tactics that various law enforcement agencies had utilized to safely place medical care at rapidly at the side of a victim. This researcher reviewed documents that had been published detailing the findings of federal agencies, such as the Federal Bureau of Investigations and the Bureau of Alcohol, Tobacco, and Firearms, along with local law enforcement agencies.

An internet search was also performed to identify the position of law enforcement guiding bodies on placing medically trained personnel proactively alongside field personnel. The International Association of Chiefs of Police website was reviewed with the purpose of locating articles that stated the stance of that organization of the need for rapid medical treatment of law enforcement officers who were injured in the line-of-duty.

In order to gain insight into the official positions of fire and emergency medical service guiding bodies on the topic of active shooter responses this researcher performed an in-depth review of materials that had been published by a number of guiding bodies. Position papers were located and reviewed that had been issued by the United States Fire Administration, the National Fire Protection Association, the International Association of Fire Chiefs, and the International Association of Firefighters.

In order to gain a broad view of active shooter medical responses the findings of the Hartford Consensus were reviewed. The Hartford Consensus was a group of experts from the fields of law enforcement, fire, pre-hospital care, trauma care, and the military who convened to develop a set of guiding strategies for public agencies to use when planning for and responding to active shooter events.

The second research question (What tactics do other fire and EMS agencies in the United States utilize at active shooter incidents?), was answered by researching the published materials

pertaining to the response tactics of fire and emergency medical services in the United States. This researcher located published articles that explained the response tactics of fire and emergency medical agencies from across the country.

A number of active shooter response policies from fire and emergency medical service agencies were reviewed in order to develop an understanding of the tactics that other emergency response agencies had utilized to place medical care rapidly on the scene of an active shooter event. The agencies whose policies were reviewed for the purposes of this research project included the Arlington County (VA) Fire Department, the Los Angeles (CA) Fire Department, the Hillsboro (OR) Fire Department, the Oak Creek (WI) Fire Department, and the Manchester (CT) Fire, Rescue, EMS Department. Three of these policies were located by performing an internet search for fire and emergency medical service agencies that currently had an active shooter response policy; however, the active shooter response policies for the Oak Creek (WI) Fire Department and the Manchester (CT) Fire, Rescue, EMS Department were located in the database of past National Fire Academy Executive Fire Officer Program applied research projects that is maintained by the United States Fire Administration.

Research question number three (What patient care strategies do fire, EMS, and other industry guiding bodies recommend be utilized at active shooter incidents?), was answered by first determining the types of injuries that are most likely to be encountered when dealing with persons armed with firearms and explosives. A review of data from the United States military was performed in order to determine the most common treatable life-threatening injuries that occurred on the battlefield. Next, the medical care strategies employed by the military were reviewed and evaluated in order to determine the priorities utilized by military medical personnel when assessing the injured. Finally, a review of the medical equipment that is carried by military

medical personnel was performed in order to develop a baseline of those supplies that could be beneficial in treating combat wounds.

An on-line search was performed in order to determine the patient care strategies that were utilized by law enforcement tactical medical personnel who anticipate encountering ballistic and explosive injuries. Specifically, this researcher was seeking to determine the exact types of medical supplies that tactical medical personnel had found to be most beneficial to treating combat-like injuries.

The Tactical Emergency Casualty Care (TECC) guidelines were reviewed and evaluated in order to determine the medical treatment strategies recommended by this committee of subject matter experts. The TECC guidelines gave specific lists of medical supplies that should be deployed with medical personnel at the scene of active shooter events.

The findings of the Hartford Consensus were reviewed in order to develop an understanding of the priorities developed by that committee when providing medical care to the victims of an active shooter.

The position statements of several fire and emergency medical service industry guiding bodies were evaluated in order to determine the patient care strategies that were recommended and to develop an understanding of the types of medical supplies that would be required in order to implement those strategies. The guiding bodies that were evaluated included the United States Fire Administration, the National Fire Protections Association, the International Association of Fire Chiefs, and the International Association of Firefighters.

Research question number four (What patient care strategies do other fire and EMS agencies in the United States utilize at active shooter incidents?), was answered by two primary methods. First, a search was done for journal articles that related the approaches to patient care

that had been implemented by fire and emergency medical agencies in the United States.

Second, this researcher reviewed the active shooter incident response policies for a number of fire and emergency medical service agencies from various parts of the United States. The fire and emergency medical services whose policies were reviewed for this applied research project include the Arlington County (VA) Fire Department, the Los Angeles (CA) Fire Department, the Hillsboro (OR) Fire Department, the Oak Creek (WI) Fire Department, and the Manchester (CT) Fire, Rescue, EMS Department.

The primary limitation to the research for this project that this researcher encountered was the limited ability to locate existing active shooter incident response policies that were in place at fire and emergency medical agencies. This researcher was limited to evaluating those policies that could be located through an internet search. The lack of identifiable active shooter policies is believed to be due to the fact that the majority of fire and emergency medical agencies do not place their policies on their websites for public viewing. Although, this limitation was identified this researcher believes that the limitation was overcome by the fact that five policies from various regions of the United States were located and utilized for the purposes of this research project. The policies that were evaluated were all very similar in their approach to dealing with active shooter events and it is assumed that any other response policies that exist would follow a similar pattern.

Results

The first research question that this researcher attempted to answer revolved around the tactics that fire, EMS, and other industry guiding bodies recommended be used when responding to active shooter incidents. Primarily this question was designed to identify the manner in which guiding bodies recommended emergency responders deploy in order to safely yet effectively deal

with the risks that are present at active shooter incidents. This researcher found that there is widespread agreement on the need for medical personnel to deploy as rapidly as possible into areas in which victims of ballistic and explosive injuries are located. The military of the United States has been operating under the concept of rapid medical intervention since at least the Civil War (Callaway & Smith, 2014) and has seen a major impact on the mortality rates of American soldiers. Currently the United States military's goal is to continue to decrease the combat mortality rate by placing a trained combat medic at the side of an injured soldier within minutes of their wounding (Smith & Delaney, 2013).

In order to safely provide medical care during combat conditions the United States military provides complete ballistic protection for combat medics identical to that worn by combat soldiers (Szoldra, 2014), including ballistic vests and helmets.

Many law enforcement agencies across the country have adopted the concept of deploying medically trained personnel with their officers, especially during tactical situations when the likelihood of ballistic injuries is elevated. The International Association of Police Chiefs has formally endorsed the concept of placing medically trained personnel at the scene of tactical situations in order to provide rapid medical care for injured officers (McArdle, 2013). Based on the research conducted by this researcher the medical personnel deployed along with law enforcement into tactical situations are protected with the same types of ballistic protective equipment worn by tactical law enforcement officers.

All of the surveyed fire and emergency medical service guiding bodies that were evaluated for this applied research project are in agreement that local fire and emergency medical service agencies must be prepared to respond to an active shooter event within their community. According to the United States Fire Administration, this preparation should involve the

development of a standard operating procedure that addresses active shooter events along with cooperation with law enforcement agencies to place armored medical personnel rapidly at the side of injured victims in order to provide point-of-wounding care (U.S. Fire Administration, 2013).

Other fire and emergency medical service guiding bodies, including the National Fire Protection Association's Urban Fire Forum, the International Association of Fire Chiefs, and the International Association of Firefighters are in unanimous agreement that fire and emergency medical agencies should be prepared to deploy medically trained personnel rapidly at active shooter events. The recommendations made by these bodies include proactively preparing for active shooter events, operating in a unified command system with law enforcement, utilizing common communication terminology, and deploying medical personnel who are protected by ballistic protective equipment.

Two industry best-practice committees were evaluated for the purposes of this applied research project. Both committees, the Hartford Consensus and the Committee for Tactical Emergency Casualty Care, recommend that medical personnel be deployed in close proximity to on-going tactical situations in order to provide life-saving medical interventions.

The second research question sought to determine the tactical approaches to deploying medical personnel at active shooter events that other fire and emergency medical service agencies utilized. A review of five fire and EMS agency active shooter response policies revealed a number of operational similarities.

All of the policies that were reviewed stressed the importance of working closely with law enforcement to develop response procedures, operate in a unified command system, and utilize armed law enforcement personnel to provide protection for medical personnel.

Additionally, all of the policies indicated that medical personnel should be placed at the side of injured victims as rapidly as possible in order to provide rapid stabilization of life-threatening injuries, although the policies differed slightly in how this goal was accomplished. Of the five policies that were reviewed three of them required medical personnel who are deployed into scenes with on-going ballistic threats to be equipped with ballistic protective equipment, while two of the policies did not specifically address this issue.

The third research question sought to determine what patient care strategies were recommended by fire, EMS, and other industry guiding bodies for use at active shooter events in order to have the greatest life-saving potential.

Based on data collected by the United States military a significant percentage of preventable battlefield deaths have been historically due to exsanguination from an extremity wound, tension pneumothorax, and airway obstruction. In order to have the greatest impact on battlefield survival combat medics carry supplies directed toward treating these three types of injuries, including tourniquets, trauma dressings, hemostatic dressings, Kerlex, compression dressings, chest seals, nasopharyngeal airways, cricothyroidotomy kits, King airways, suction, and bag-valve-masks (Montgomery & Kotwal, 2011).

Law enforcement agencies across the country have taken a cue from the military and have directed their tactical medical care toward treating the same types of bleeding and airway injuries.

Both the Committee for Tactical Emergency Casualty Care and the Hartford Consensus agree on the basic patient treatment approach that should be taken at active shooter incidents. They state that patients suffering from uncontrolled bleeding and breathing issues should be accessed as rapidly as possible, stabilized, evacuated from the danger zone, and rapidly

transported to a definitive medical care facility. Both committees recommended that medical personnel be equipped with adequate supplies to treat bleeding and breathing injuries.

The fire and emergency medical service guiding bodies that were researched for this project seem to be in unanimous agreement that emergency response agencies should develop plans and procedures for accessing patients near their point-of wounding. Additionally, any life-threatening bleeding and breathing issues should be immediately addressed in the greatest number of victims possible, in the shortest possible amount of time. After all patients are accessed the injured should then be removed from the hazard zone to a safe location from which they can be transported to definitive medical care.

The fourth research question was designed to determine what patient care strategies other fire and EMS agencies were utilizing at active shooter incidents. All of the fire and emergency medical service agencies that were researched for this project showed significant similarities in their approaches to dealing with active shooter events. They all stressed the importance of rapidly locating victims and treating life-threatening injuries, with a focus on addressing major hemorrhage and breathing issues. All of the departments acknowledge the importance of rapidly evacuating patients in some manner so that they may receive more in depth assessments and treatments.

Based on the research that was conducted this researcher was able to develop a comprehensive standard operating procedure for the Rogers Fire Department that adequately addresses the pertinent aspects of an active shooter incident and solves the problem that this applied research project was designed to address. The standard operating procedure that was developed can be found in its entirety in Appendix A of this document. The following is a description of the policy that was developed.

For purposes of deployment the Rogers Fire Department will utilize the Rescue Task Force concept in which members of the department are deployed along with law enforcement personnel to provide point-of-wound care to victims where there is an on-going ballistic or explosive threat. The goal of medical personnel will be to treat, stabilize, and remove injured patients in a rapid manner. The medical personnel will deploy wearing ballistic protective equipment only into areas that have been previously cleared by law enforcement and where there is a minimal or mitigated threat. Since the Rogers Fire Department is also responsible for providing patient transport services the Rescue Task Force positions will be staffed by members of fire companies in order to leave the ambulance crews available to provide rapid transport to definitive care facilities.

The fire department should expect to operate in a unified command system with the responding law enforcement agency. Deployment of a Rescue Task Force will be at the discretion of the fire department member of the unified command. In order to ensure adequate ability to communicate the fire department members of the Rescue Task Force will operate on a separate channel from the law enforcement members; this will allow the medical personnel to communicate patient locations and statuses while the law enforcement personnel focus on identifying those areas of the scene that are safe to access.

The equipment needed to deploy the Rescue Task Forces will be carried on two apparatus, Battalion 1 and Rescue 5. When the need arises to deploy a Rescue Task Force the Incident Commander will need to special-call for one or both of these units along with the number of fire companies that area needed to staff the Rescue Task Force positions. The minimum equipment that each fire department member must have in order to deploy will include a Kevlar helmet, tactical body armor, a radio, a tactical medical kit, and patient examination

gloves. The medical equipment contained in the medical kit will be designed for primarily treating major hemorrhage, tension pneumothorax, and airway obstruction.

All patients that are encountered will be treated according to the guidelines established by the Commission on Tactical Emergency Casualty Care. Members of a Rescue Task Force should access and stabilize as many victims as possible until they deplete their medical supplies, at that point they should begin evacuation of victims.

The Rogers Fire Department policy mandates that all members of a Rescue Task Force must stay in close proximity to one another and must evacuate immediately if any member is injured during operations.

As with all incident types the Rogers Fire Department will operate in a National Incident Management System (NIMS) compliant incident command system at active shooter incidents. A Rescue Group Supervisor will be designated by the Incident Commander and will oversee the functioning of the Rescue Task Force personnel. A hypothetical incident command system (ICS) chart is included in the policy in order to demonstrate how the incident command system at an active shooter incident should expect to be established.

Discussion

It is apparent from a review of the literature that was surveyed for the purposes of this applied research project that there is widespread agreement among a variety of entities that emergency response agencies must develop a plan for dealing with active shooter events. It has been stated that “it’s now time to be proactive, not remain reactive. Simply and sadly put, you need to incorporate active shooter incidents into your training curriculum” (Rogers, 2013).

In addition to the common agreement that agencies must prepare to deal with active shooter events this researcher also found widespread agreement on the strategies that should be

utilized in the response stage once an active shooter event has occurred. The most critical component of limiting the effects of an active shooter event is rapid access to those victims who were injured by the shooter. There is significant documentation that exists on the ability to improve patient outcomes if medical care is provided to the victims of ballistic and explosive wounding within a few seconds or minutes of their being wounded (Smith & Delaney, 2013). This researcher found that the benefits of rapid care for the victims of ballistic and explosive injuries have been demonstrated by the experiences of the United States military. As was noted by Connolly (2004), the survival rates of American soldiers wounded in battle have seen significant increases over the years as the practice of deploying medically trained personnel with combat units has become common practice.

Placing medical personnel into a scene that has an on-going ballistic threat is a new concept within the emergency response community. In the past it was common practice to have medical responders stage some distance from the scene until law enforcement personnel cleared the scene and determined that the potential for continuing violence was eliminated. When one considers the number of preventable deaths that have occurred because victims did not receive medical care for several minutes or hours after their wounding it seems readily apparent to this researcher that fire and emergency medical service providers must aggressively seek out and treat those victims of active shooters. However, the location and treatment of victims under potentially combat-like circumstances must be approached in a methodical and safe manner.

All authorities and guiding bodies agree that in order to reach and treat victims of an active shooter medically trained personnel must be provided with some level of protection from an assailant who is armed with ballistic and explosive weaponry. The two primary methods that this researcher found for providing medically trained personnel with protection from ballistic and

explosive threats are providing them with an escort of armed law enforcement personnel and equipping them with ballistic protective equipment.

Among the literature that was reviewed for this applied research project there was found to be universal agreement that fire and emergency medical responders must work cooperatively with law enforcement personnel in order to provide the most rapid patient care possible. The authorities agree that first-arriving fire and emergency medical responders must work with first-responding law enforcement assets to rapidly deploy into the areas that have been cleared but not secured (Smith & Delaney, 2013). The United States Fire Administration's guide to active shooter incidents specifically calls for medical providers to be escorted by armed law enforcement personnel so (U.S. Fire Administration, 2013).

In addition to the guiding bodies advocating the practice of utilizing law enforcement officers to protect medical personnel the fire and emergency medical service agencies whose policies were reviewed for this research project all supported and mandated the practice. In fact, the policy of the Arlington County Fire Department requires that those law enforcement officers assigned to protect the medical personnel may not be further from the medical personnel than close line of sight (Arlington County Fire Department, 2012).

In order for medical personnel to feel confident that they can perform effectively and safely it seems prudent to always provide them with armed protection. This researcher could not find any published literature that advocated for deploying medical personnel at the scene of active shooter events without armed protection provided by accompanying law enforcement officers.

The military has long required that combat medics be issued the same level of ballistic protection as other combat soldiers. This trend to protect medical personnel with ballistic

protective equipment has been continued in the law enforcement community. In fact, it has been stated that before even thinking about medical equipment, agencies should first equip their tactical medical personnel in the same manner as other tactical officers (French, 2013). It seems readily apparent that the experience of military and law enforcement tactical medics would strongly indicate that anyone, including medical aid providers, who is deployed into an area where there is the possibility of encountering armed assailants should be protected by ballistic protective equipment.

All of the fire and emergency medical service guiding bodies that were reviewed for the purposes of this research project explicitly supported the use of ballistic protective equipment for medical personnel. According to the United States Fire Administration, providing the appropriate protective gear to personnel is one of the minimum goals that all fire and emergency agencies should meet (U.S. Fire Administration, 2013). The International Association of Fire Chiefs position statement specifically calls for those rescuing victims at active shooter events to be provided ballistic helmets and vests (International Association of Fire Chiefs, 2013). It seems that equipping medical personnel with ballistic personal protective equipment at active shooter events has become the industry standard that should not be ignored by emergency response agencies.

Surprisingly, of the five fire and emergency medical service agencies whose policies were reviewed by this researcher only three of the agencies specifically require within their policy that medical providers who are deploying into potentially hazardous areas at active shooter events be equipped with ballistic protective equipment. Perhaps the two agencies whose policies do not require this level of protection have other addendums or policies that mandate the use of the equipment, however, no such documents were located by this researcher. It appears

that the prudent approach that the Rogers Fire Department should take would be to provide ballistic protective equipment for all personnel who are deployed into the warm zone to locate and treat patients; this would require the department to purchase the ballistic equipment and train personnel in its use.

Close cooperation with law enforcement at the scene of an active shooter event was recommended by all of the sources that were reviewed for the purposes of this research project. This cooperation should begin from at the policy development phase and extend through the entire training and implementation of the policy. The United States Fire Administration specifically states that fire and emergency medical agencies should plan, train, and operate in a unified command system with members of law enforcement (U.S. Fire Administration, 2013). All of the fire department policies that were reviewed for this project require that their personnel operate in a unified command system with law enforcement. An adequate active shooter response policy on the part of the Rogers Fire Department will require that the fire department work closely with the Rogers Police Department during the planning, implementation, and response phases of the policy.

The experience of the United States military has shown that the primary treatable causes of battlefield deaths were bleeding from extremity wounds, tension pneumothorax, and airway obstructions (Callaway & Smith, 2014). These types of injuries are identical with what has been seen in the active shooter incidents that have occurred in the United States over the last several years. The Tactical Emergency Casualty Care guidelines stress the importance of response personnel being trained and equipped to deal with massive hemorrhage and tension pneumothorax (Callaway et al., 2011).

All of the fire departments whose policies were reviewed for this research project place a strong emphasis on preparing and equipping personnel to treat severe traumatic injuries.

In order to adequately treat victims who are suffering from traumatic injuries resulting in major blood loss, tension pneumothorax, and airway obstructions there are a number of specific interventions that can be performed. The Rogers Fire Department is already equipped and trained to deal with all types of traumatic injuries, including all types of hemorrhages, tension pneumothorax, and airway obstructions. As an advanced life support service all members of the Rogers Fire Department are required to be trained to at least the basic emergency medical technician level and over half of the members are trained at the paramedic level. The specific medical supplies that are needed to treat severe traumatic injuries are currently carried on the majority of fire department apparatus in the city of Rogers; however it will be necessary for the department to acquire a larger cache of these supplies to effectively handle an active shooter event.

The Rogers Fire Department is in a unique situation in that it already has a great deal of the training, equipment, and supplies that will be needed to adequately handle an active shooter incident. Additionally, with five advanced life support fire companies and four advanced life support ambulances strategically placed around the city the department is in a good position to provide rapid response to any incident. It has been shown that seconds and minutes are very important when dealing with ballistic injuries so the ability to quickly arrive on scene and begin operations is likely to have an impact on the ability of the department to save lives.

The Rogers Fire Department has an excellent relationship with the Rogers Police Department and it is very reasonable to expect that the two departments can work well together

to limit the effects of an active shooter. Training will be the key to effectively melding the two departments into a cohesive response force.

The greatest anticipated hurdle to overcome for the implementation of an effective active shooter response is the acquisition of the appropriate ballistic protective equipment. The ballistic equipment may be acquired through the capital budget or possibly through a grant.

After researching the active shooter topic, this researcher is convinced more than ever that it is imperative that the Rogers Fire Department develop an active shooter response policy and take the necessary steps to implement the policy. There is no indication that active shooter events will decline in number or severity and the Rogers Fire Department must be prepared to respond should an active shooter incident occur within the city of Rogers.

Recommendations

In order for the Rogers Fire Department to be adequately prepared to respond to an active shooter incident there are a number of steps that must be taken. Based on the information that was discovered while performing this applied research project a standard operating procedure has been developed in cooperation with the Rogers Police Department; this policy should be formally adopted by the Rogers Fire Department. Adoption of the policy will involve informing all members of the department about the various components of the policy, including terminology, manner of deploying at active shooter incidents, communications, and how the Rescue Task Forces fit into the incident command chart.

All personnel of the Rogers Fire Department will need to be trained in the Rescue Task Force concept, including how the task forces interact with law enforcement and familiarization with the patient treatment guidelines established by the Commission on Tactical Emergency Casualty Care. The primary means by which the Rescue Task Force training should be delivered

are through classroom lecture, question and answer sessions, and practical hands-on evolutions and evaluations. Once fire department personnel have grasped the Rescue Task Force deployment and treatment model joint training should be completed with the members of the Rogers Police Department. The training for the members of the police department will primarily focus on instruction in their role in the Rescue Task Force concept. Several joint training drills should be performed in which all members of the fire and police departments who could participate in a Rescue Task Force deployment are allowed to operate in a realistic active shooter scenario.

The Rogers Fire Department must identify and purchase all of the equipment and supplies that are needed to deploy within the Rescue Task Force model. The items that will need to be purchased will include ballistic protective equipment, tactical medical kits, and sufficient medical supplies to treat multiple trauma patients. A committee should be formed to evaluate the various types of ballistic protective equipment that is available and to recommend the one that best meets the needs of the department. Additionally, the fire department EMS Committee should make a recommendation on the types and quantities of medical supplies that will be carried by each Rescue Task Force.

Based on the research that was performed it is the opinion of this researcher that the Rogers Fire Department and all fire and emergency medical response agencies should take the appropriate steps to prepare for an active shooter incident by following the guidelines established by the Hartford Consensus, the Commission on Tactical Emergency Casualty Care, the United States Fire Administration, and other guiding bodies.

It is the belief of this researcher that if the recommendations contained within this document are followed the Rogers Fire Department will be adequately prepared to respond to an

active shooter incident and will be able to have a positive impact by effectively locating and treating the greatest number of victims possible.

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Appendix A

 Rogers Fire Department Standard Operating Procedures	
Policy Title:	Active Shooter Medical Response
Policy Number:	Volume:
Approved By:	Tom Jenkins Last Updated:
CFAI Reference:	CAAS Reference:
Revision Summary:	

PURPOSE

The purpose of this policy is to establish the guidelines and procedures for the deployment and use of Rogers Fire Department Rescue Task Forces in response to active shooter incidents.

DEFINITIONS

Rescue Task Force (RTF) – A group of resources deployed to provide point-of-wound care to victims where there is an on-going ballistic or explosive threat. The task force treats, stabilizes, and removes injured patients in a rapid manner while wearing ballistic protective equipment and operating under the protection of members of a law enforcement organization. The typical RTF is comprised of four-five personnel: two trained law enforcement officers and two or three Rogers firefighters. When possible, at least one of the firefighters should be a paramedic. The fire department RTF positions will be staffed by members of fire companies in order to maintain the availability of Medic crews to treat and transport patients.

The RTF can be deployed to the following incident types:

- Active shooter in a school, business, mall, conference, special event, etc.
- Any incident in which there is the possibility of an on-going ballistic or explosive threat.

Hazard Zones

- Hot Zone – An area where there is a known hazard or life threat that is direct and immediate. An example of this would be any area not cleared by law enforcement personnel that may contain an active shooter. RTFs will not be deployed into a Hot Zone.
- Warm Zone – An area that has been cleared by law enforcement personnel and where there is a minimal or mitigated threat. RTFs deploy into this zone to locate and treat victims.
- Cold Zone – An area where there is little or no threat due to geography or having been secured by law enforcement personnel. The triage, treatment, and transport units will be established in the Cold Zone.

Contact Team – A team of law enforcement personnel assigned to advance toward the threat and initiate contact with the active shooter to prevent further injury or loss of life. The contact team performs a primary clearing of areas as they advance.

Casualty Collection Point – The casualty collection point is the location to which patients are evacuated from the Warm Zone to be triaged. This area should be located in the Cold Zone and serves as a marshalling area for standard MCI actions to begin.

POLICY

Deployment of Rescue Task Forces

Incidents that involve an active shooter or any type of on-going ballistic or explosive threat will require the fire department to operate in a Unified Command system with law enforcement. The activation and deployment of RTFs will be at the discretion of the fire department member of the Unified Command once law enforcement personnel have determined that portions of the scene meet the Warm Zone criteria and may contain victims.

The tactical gear and medical supplies that are needed to deploy the RTFs will be carried on Battalion 1 and Rescue 5. When the need arises to deploy RTFs, the Incident Commander must special-call one or both of these units along with the number of fire companies that are needed to staff the RTFs.

The number of fire companies requested to deploy as RTFs will vary depending on the magnitude of the incident and the number of victims that are anticipated. Small incidents may allow for RTFs to be deployed utilizing personnel already at the scene. Moderate sized incidents will require the Incident Commander to request through RCD the number of fire companies that are needed to fill the RTFs that will be deployed at the incident. Large incidents that involve multiple patients and meet the criteria established in SOP 510-Mass Casualty Incidents will require the Incident Commander to request a full MCI Alarm in addition to requesting the number of fire companies that are needed to fill the RTFs.

Communications

In order to maintain a redundant communications system throughout the incident the fire and police members of an RTF will operate on separate radio channels. The fire department members of the RTF will operate on the fire department channel that they are assigned by the Incident Commander and will communicate directly with the Rescue Group Supervisor, Rescue Branch Director (if established) or Incident Commander. The law enforcement members of the RTF will operate on the channel that they are assigned by the Incident Commander and will communicate with law enforcement supervisors.

The Rogers Fire Department members of the RTF will identify themselves on the radio by the task force designation that they are assigned by the Incident Commander, such as “*Rescue Task Force 1*” or “*Rescue Task Force 2.*”

Equipment

The minimum equipment that a fire department RTF member must have in order to deploy includes:

- Kevlar helmet
- Tactical body armor
- Radio
- Tactical medical kit
- Exam Gloves

Operations

Once a fire company has been assigned as part of a RTF they will retrieve the mandated RTF equipment and report to the designated location to be formed into an RTF with law enforcement personnel.

RTFs will move in and out of the building through entrances and corridors that have been cleared by the initial contact teams. The RTFs will operate only within those areas of the building designated by the Incident Commander as meeting the Warm Zone criteria. All members of a RTF must remain within sight and sound contact of one another with one law enforcement officer providing front security for the team and one providing rear security during movement. The law enforcement members of the RTF must remain in a position to provide effective defensive cover fire for the team at all times.

The initial RTFs will be deployed into the Warm Zone with the purpose of locating and stabilizing patients according to the guidelines of the Commission on Tactical Emergency Casualty Care. These initial teams will focus on providing point-of-wounding patient stabilization that includes stopping major hemorrhages and addressing airway and breathing issues. The initial RTFs must exercise discretion in the amount of time spent with each patient based on the condition of the patient, the situation, and the number of additional anticipated patients, keeping in mind that their primary goal is to move rapidly through the Warm Zone, providing stabilization techniques to the greatest number of patients possible in a short period of time in order to maximize their effectiveness. It is the responsibility of these initial teams to notify the Rescue Group Supervisor or Incident Commander of the number of patients that they encounter and to prioritize patients for rapid removal by follow-up RTFs. Once a RTF exhausts their medical supplies they should notify the Incident Commander and begin the patient evacuation process to the Casualty Collection Point.

Based on the circumstances of the incident, additional RTFs may be deployed to remove the stabilized patients to the exterior Casualty Collection Point, to assist the initial RTF with patient treatment, or to replace the initial teams once their medical supplies are exhausted.

Once patients reach the Casualty Collection Point they will be triaged and managed according to the guidelines established in SOP 510-Mass Casualty Incidents.

Emergency Evacuation Procedures

If the area in which a RTF is operating changes from a Warm Zone to a Hot Zone due to a direct and immediate threat the RTF should seek appropriate cover and determine if evacuation from the building is necessary.

If any member of a RTF is injured during operations, immediate evacuation of that RTF will occur.

Hypothetical ICS Chart for an Active Shooter Incident:**Initial Assignment (Medical Emergency): E6 Med5****MCI Assignment + Active Shooter Protocol: E1 E2 E3 E4 R5 BC1**