



A Report Compiled By The InterAgency Board

Improving Active Shooter/ Hostile Event Response

**Best Practices and Recommendations
for Integrating Law Enforcement, Fire, and EMS**

September 2015



Contents

Acknowledgements	3
Executive Summary	5
Introduction	7
Purpose of Report and Summit	
Background	
About This Report	
Findings and Recommended Best Practices	9

Acknowledgements

The InterAgency Board (IAB) and its federal partners would like to thank the participants of the Active Shooter Summit held in Charlotte, NC, March 17–19, 2015. Participants gave their time and energy to the Summit and this report.

Summit Participants:

Edward Anderson, Seattle Police Department
Mark Anderson, Bellevue (WA) Fire Department
Christopher Baldini, Philadelphia Fire Department
Edward Baldini, Philadelphia Police Department
Kenneth Beatty, New York City Police Department
Tony Biles, London (UK) Fire Brigade
Pete Blair, Texas State University
Steve Brochu, Charlotte-Mecklenburg Police Department
Paul Brooks, Department of Homeland Security, Office of Health Affairs
Michael Cerovski, City of Loveland (CO) Fire Department
Thomas Chin, Los Angeles Police Department
Mike Clumpner, Charlotte Fire Department
Michael Contreras, Los Angeles Fire Department
Peter Cox, London (UK) Fire Brigade
John Curnutt, Texas State University
Andrew Cutbill, London (UK) Fire Brigade
Kent Davis, Charlotte Fire Department
John Delaney, Arlington County (VA) Fire Department
John Donohue, Maryland Institute for Emergency Medical Services System
Jeff Dulin, InterAgency Board
John Esposito, Fire Department, City of New York
William Frazier, Philadelphia Police Department
Tracy Frazzano, Montclair Police Department
Wayne Freeman, South Carolina Law Enforcement Division
Scott Garman, Department of Homeland Security, Office of Health Affairs, Medical First Responder Coordination Branch
Bill Godfrey, Texas State University
Ryan Grothe, Denver Police Department
Nathan Hiner, Arlington County (VA) Fire Department
Evan Hannah, Clark County (NV) Fire Department; Southern Nevada Fire Operations
Mark Kittelson, Clark County (NV) Fire Department; Southern Nevada Fire Operations
Johnny Jennings, Charlotte-Mecklenburg Police Department
Eric Klaas, City of Loveland Fire Department
Denny Kinney, Federal Bureau of Investigation
Mike Larson, Thompson Valley (CO) EMS
James Manson, Denver Health and Hospital Authority
Joel Martin, Las Vegas Metropolitan Police Department
Phil Metzler, City of Loveland (CO) Police Department

Ray Mollers, Department of Homeland Security, Office of Health Affairs, Medical First Responder Coordination Branch
Brent Newbanks, City of Loveland (CO) Police Department
Sean Newman, Fire Department, City of New York
Terry Nichols, Texas State University
Bradley Nielson, Los Angeles Police Department
Joshua Pearson, Seattle Fire Department
Patrick Phelan, Denver Police Department
James Robinson, Denver Health and Hospital Authority
Daniel Schultz, Department of Homeland Security, Office of Infrastructure Protection, Emergency Services
James Schwartz, Arlington County (VA) Fire Department
Geoff Shapiro, George Washington University
Jason Shelton, Los Angeles Fire Department
Winton Singletary, Philadelphia Police Department
Reed Smith, Arlington County (VA) Fire Department
Shannon Sovndal, Denver Health Medical Center
Thomas Traynor, New York City Police Department
Steven Townsend, Carrollton Fire Rescue
Coerte Voorhes, Charlotte-Mecklenburg Police Department

Summit Support Staff:

J. J. Knight, IAB Program Office
Kelly Loyko, IAB Program Office
Daneen Matheson, IAB Program Office
Andrew Walker, IAB Program Office

Executive Summary

Active shooter/hostile events (ASHEs) have been increasing in frequency and severity since 2000 (Blair & Schweit, 2014). Unlike many other types of incidents, an ASHE will almost always result in the deployment of all first responder disciplines. In this environment, with multiple disciplines responding, a fully integrated incident response system is required with all first responder components working in concert. Historically, law enforcement, fire, and emergency medical services (EMS) personnel have viewed their first responder roles as independent of each other. As a result, the first responder community may not be prepared to function as one team to rapidly neutralize threats and save lives. To further the goal of helping agencies better prepare a fully integrated, seamless ASHE response, an Active Shooter Summit was convened by the InterAgency Board (IAB) in Charlotte, NC, March 17–19, 2015, to share lessons learned and identify best practices for an integrated ASHE response. Participants included law enforcement, fire, and EMS responders from municipalities in the United States and United Kingdom, several state and federal agencies, and Texas State University.

Following presentations by each participating municipality and agency on their ASHE experience and planning, Summit participants representing the three disciplines worked together in five focus areas—(1) policy, (2) planning, (3) medical, rescue, and equipment, (4) training and exercises, and (5) incident command. These focus groups identified 29 discrete recommendations; this report condenses those recommendations into 10 broader best practices:

1. Ensure leadership prioritizes and supports the development and implementation of proactive ASHE-relevant joint policies, procedures, training, exercises, and equipment.
2. Integrate and improve coordinated pre-event law enforcement, fire, and EMS policy development, planning, training, and exercises.
3. Create and implement a common operating language.
4. Integrate and improve coordinated command and incident management across all responder disciplines.
5. Adopt the Rescue Task Force concept.
6. Employ Tactical Emergency Casualty Care (TECC).
7. Implement Casualty Collection Points (CCP).
8. Develop and communicate evidence-based guidelines for fire/EMS ballistic protective equipment (BPE).
9. Establish evidence-based guidelines and education for medical and rescue equipment.
10. Promote two-way public communication as an essential component for effective ASHE response.

Fundamentally, these best practices encourage a better understanding of roles, capabilities, and core competencies among first responders and promote effective communication and coordination through integrated planning, training, exercises, response, and mitigation. As components of an integrated response, these 10 best practices can be adopted in part or in whole depending on agency resources and needs. In addition, many of these best practices have value in any type of emergency response and are not unique to an ASHE response. The IAB will continue to be a platform on this topic. This report will help guide future working meetings with the broader community engaged in planning for and responding to an ASHE incident, with the goal of preparing detailed, implementable guidelines for adoption at the local level.

Introduction

Purpose of Report and Summit

This report is intended to inform communities of the value and necessity of developing an integrated response to future ASHEs, with the long-term goal of influencing change in first responder ASHE response. The findings of this report were shaped by the March 2015 Active Shooter Summit's two objectives.

1. Share ASHE lessons learned from participating municipalities and agencies and identify similarities and differences in response plans.
2. Develop specific recommendations for integrating law enforcement, fire, and EMS response based on best practices to include in Active Shooter Response Guidelines, which is being prepared by the IAB.

Background

Sanctioned by the Attorney General of the United States, the IAB was founded in 1998 by the Department of Defense's Consequence Management Program Integration Office and the Department of Justice's Federal Bureau of Investigation Weapons of Mass Destruction Countermeasures.

The mission of the IAB is to strengthen the Nation's ability to prepare for and respond safely and effectively to emergencies, disasters, and chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE) incidents. The IAB accomplishes this by:

- Emphasizing interoperability, compatibility, and standardization
- Fostering a multidisciplinary perspective
- Facilitating effective intergovernmental partnerships
- Being a credible voice of the responder community
- Being proactive
- Sharing field operational experiences and practices

Within this context, the IAB's Enhanced Police, Fire, and Emergency Medical Service Integrated Response Capabilities Special Project Group prepared a white paper for the Active Shooter Summit held in Charlotte, NC, March 17–19

(http://www.interagencyboard.org/sites/default/files/publications/Integrating%20LE_Fire_EMS%20during%20HTV_FINAL.pdf). The initial draft of this white paper focused on how to develop integration and coordination between first responder agencies in advance of an ASHE and helped inform Summit participants.

The Summit drew upon law enforcement, fire, and EMS expertise from municipalities in the United States and United Kingdom, several state and federal agencies, and Texas State University. Following a day of presentations by each municipality and agency on their ASHE experiences, participants worked in five focus areas—(1) policy; (2) planning; (3) medical, rescue, and equipment; (4) training and exercises; and (5) incident command—to develop best practices for an integrated ASHE response.

About This Report and Next Steps

This report documents the key findings of the March 2015 Active Shooter Summit. Summit participants—who worked in either policy; planning; medical, rescue, and equipment; training and exercises; and incident command focus groups—identified 29 discrete recommendations for an integrated ASHE response. This report condenses and organizes the 29 specific recommendations into ten broader recommended best practices.

The IAB will continue to be a platform on this topic. This report will help guide future working meetings focused on preparing detailed, implementable guidelines scalable for use by all jurisdictions in planning, training, exercising, and responding to an ASHE.

Findings and Recommended Best Practices

Ensure leadership prioritizes and supports developing and implementing proactive ASHE-relevant joint policies, procedures, training, exercises, and equipment.

Historically, law enforcement, fire, and emergency medical services personnel have viewed their respective first responder roles as independent of each other. Developing and implementing a fully functional joint law enforcement, fire, and EMS response to an ASHE will require changes to current practices. It will also require overcoming cultural misperceptions, such as “an ASHE incident is only a law enforcement problem and not an all-hazards, all responders problem.” These changes will not be easy, but they are necessary to create a coordinated response. The full support of municipal and agency leadership at all levels, including elected officials, is essential to making a joint ASHE response both a priority and a reality. Without leadership support, developing, implementing, and funding joint ASHE-relevant policies, procedures, training, exercises, and equipment will not be possible.

Recommended best practices for securing leadership prioritization and support for joint ASHE-relevant capabilities include:

1. Ensure leadership at all levels understands the increasing threat ASHEs pose to the first responder community and the public and the role a unified and integrated response can play in mitigating the threat and its impact.
2. Engage municipal and agency leaders in joint policy and planning development.
3. Request leadership support for funding and implementation.
4. Show results. Invite municipal and agency leaders to participate in training and exercises. In addition to better preparing them for their role in an ASHE response, help them become more familiar with the benefits of a joint response.
5. Develop an initiative to communicate and build support among all stakeholders and emergency managers from the community, including unit commanders, policy makers, human resources, and union representatives. Early, transparent involvement with all stakeholders will help build support for creating an effective joint response.
6. Look beyond the known, existing threats and consider approaches for preparing and responding to the evolving threat environment.

Integrate and improve coordinated pre-event law enforcement, fire, and EMS policy development, planning, training, and exercises.

To a great extent, an effective response to any emergency is based on the advance work agencies perform in the areas of policy, planning, training, and exercises. Law enforcement, fire, and EMS response to an ASHE is no exception. Because of the interdisciplinary environment inherent in responding to such an incident, the importance of coordinated pre-event work is paramount. Formalizing responsibilities and processes and practicing them across departments before an emergency helps establish and maintain the relationships needed to effectively respond to an active shooter incident and save lives.

Recommended best practices related to integrating and improving the coordination of law enforcement, fire, and EMS pre-event policy development, planning, training, and exercises include:

1. Create opportunities for joint policy and planning through integrated policy discussions and joint planning among stakeholders, which will lead to joint policies and plans among law enforcement/fire/EMS/dispatch.
2. Consider basic operational awareness training at the law enforcement, fire, EMS, and dispatch level to promote cross-training and improved understanding of roles and responsibilities. Operational awareness training should be implemented as practical based on the local environment and resources available and can be accomplished through a basic “Law Enforcement 101” or “Fire Operations 101” course format.
3. Revise the job description of fire/EMS personnel to include that all personnel should be able to integrate and operate safely and effectively with other responding disciplines and agencies when responding to any incident, including acts of violence.
4. Establish an all-hazards standing committee responsible for integrating responder assets, organizations, and disciplines to include ASHEs. Such a committee should include representation from local, state, and federal law enforcement; jurisdictional and county EMS; local fire and rescue; local and state emergency management; and local 911, public-safety answering point (PSAP), dispatch, and communication.
5. Recognize the important role of dispatchers as generally the first contact of the responder community to become engaged in an ASHE and thus must become part of a seamless response.
 - a. Rotate law enforcement, fire, and EMS personnel through dispatch training.
 - b. Create a “Dispatch 101” and field training educational program.
 - c. Rotate cross-training assignments (Have fire/EMS personnel teach law enforcement and vice versa).
 - d. Integrate dispatch into all aspects of training and exercise scenarios.
 - e. Training and exercises should include victim simulations and training on recognizing the type of incident (the difference between shots fired and an active shooter).
6. Enhance training and exercises by creating data-driven training/exercises focused on the proper personnel that include measurable benchmarks tied back to the re-evaluation and revision of policy, plans, procedures, and training as needed.

7. Create online interdisciplinary and realistic training by including actual radio/audio recordings of ASHE responses and other training aids to include improvised explosive device (IED) simulations, markings, precursors, photographs, and videos.

As with other efforts to improve emergency response, required time and funding were identified as potential obstacles to enhancing pre-event activities. Other challenges unique to pre-event preparation include overcoming past prejudices and egos, line officers not receiving command-level training relative to their role, lack of candor, and fear of liability.

Create and implement a common operating language.

Effective communication is essential in emergency response. The importance of communication is magnified when responding to an ASHE. One obstacle to effective and efficient communication is the lack of common language and terminology among the responding agencies and disciplines. It is critical to have common terms defined and agreed upon among the agencies within a jurisdictional area, documented in all local plans and procedures, and practiced in joint training and exercises.

During the Active Shooter Summit, eight best practices relative to the development of a common language were identified:

1. Use plain language to enhance communication and response.
2. Make terms plain and easy to understand under stressful conditions.
3. Use terms that promote agencies working together.
4. Ensure common language and terms are agreed upon and practiced pre-event.
5. Coordinate and communicate definitions with regional aid response partners.
6. Decide on the best common term for “active shooter/hostile event.”
7. Allow for flexibility with terms that need to conform to local uses and definitions. Develop a glossary of common terms and definitions across agencies and disciplines to promote prompt and safe collaboration in response. For example, the terms *cleared*, *secured*, and *casualty* are all common terms that should be defined locally by your jurisdiction, because these terms often mean something different to other agencies and jurisdictions. Common terms like these should not deviate from local current usage and practice.
8. *Hot, Warm, and Cold Zones* – Summit participants decided to adopt the term “Warm Zone” for the area where a potential hostile threat exists because the term warm/operational zone indicates there is a potential hostile threat to responding personnel, but the threat is not direct and immediate. Establish warm corridors for moving multiple ambulatory and non-ambulatory victims. Consider using and defining the traditional “treatment” zone.

Example Common Definitions

(These definitions are used by the Los Angeles Police Department and can be adapted to local jurisdictions as applicable.)

Hot Zone - Where a direct and immediate threat exists based on the complexity and circumstances of the incident as determined by law enforcement. An area within range of direct gunfire or explosive devices or an unsecured or unsearched area where a suspect could be hiding is considered to be a Hot Zone. The Hot Zone is an Immediately Dangerous to Life and Health (IDLH) zone. Law enforcement resources (Contact Teams, SWAT teams, TEMS Specialists) should be the only safety personnel operating in the Hot Zone.

Warm Zone - Where a potential threat exists, but the threat is not direct or immediate. An area that has already been searched and secured by law enforcement is considered to be a Warm Zone. The threat still exists elsewhere in the building or venue, but law enforcement has cleared and secured an area to which fire and EMS personnel may be brought in to render Life Saving Intervention (LSI) to injured victims.

Cold Zone - Where no significant danger or threat can be reasonably anticipated. Determined by utilizing distance, geographic location or terrain with respect to the type of firepower or explosive potential, the Cold Zone is the appropriate location for the Incident Command Post, Treatment Areas, Staging and logistical functions of the incident.

More deliberation between the disciplines will be needed to recommend specific terms. Although agreeable in concept, it will be difficult to find terms and definitions that can be used interchangeably among the disciplines (and municipalities) as they may not be applicable across the board and will not reach as many people. Summit participants recommended the first step could be to conduct research on national definitions (in the National Incident Management System documents, for example), where possible, these definitions should be coordinated with regional mutual aid response partners.

In the event common terms and definitions can be decided upon, training for all disciplines (fire, EMS, law enforcement, and dispatch) will be needed and reinforced in manuals and publications.

An ASHE will almost always result in the deployment of all first responder disciplines. The coordination of all responding disciplines through a unified and fully integrated incident command and management system is imperative.

Recommended best practices related to integrating and improving the coordination of law enforcement and fire/emergency services command and incident management include:

1. A unified, co-located incident command must be established as soon as the initial first responder arrives on the scene. This is a bottom-up concept, where decisions need to be made quickly by the initial responders. Immediate actions save lives. Incident command often starts with the smallest unit or individual at the scene from each discipline. Command decisions should not wait for the arrival of more senior leaders. Initiative by these initial responders needs to be encouraged and they should have flexible protocols to allow them to respond while waiting for senior leaders to arrive at the scene. Coordination does not end with the initial responders but needs to continue as senior commanders arrive on the scene.

Summit participants emphasized that integrated, coordinated incident command is built from the ground up by cross-disciplinary development and execution of policy and procedures, training, and exercises. Working together before an incident helps build relationships and creates a better understanding of roles, priorities, and responsibilities. Other relevant points discussed include:

- Use the term “unified” command. A unified command should be focused on providing a coordinated response. A unified command is NOT having three mobile command vehicles parked next to each other. A unified command IS having all disciplines working closely together to coordinate their response actions.
- Stage co-responding agency representatives within arm’s reach to facilitate communications and clear direction.
- Consider cross-training and staff exchange assignments between law enforcement, fire, EMS, and dispatchers.
- Recommend guidelines that are implementable and scalable to the size, capabilities, and responsibilities of the local government.
- Provide instructions, directions, and checklists for establishing incident command. Consider predefined incident types with response packages. Build in recommendations for regular joint debriefs.
- Conduct training in a fast command/mobile command environment. Practice the transition as fixed unified command posts are established and additional leadership from multiple disciplines arrive at the scene.
- Public safety response characteristics vary by discipline and response plan. Create/provide joint radio channels so all public safety agencies can hear what each is doing.
- Assemble Rescue Task Force (RTF) assets as they become available.
- Plan and train for parallel contact and rescue team operations.
- Identify the rally/staging point.

2. Scene control and stabilization is another essential element in effective incident response. Recognizing the first responder ethos and culture of responding quickly, it is also important to control the scene by accurately characterizing the threat, preventing overconvergence of responders by managing assets (people and equipment), and ensuring scene security and access.

Similar to other best practices mentioned in this report, key elements of scene control and stabilization include pre-event planning, the ability to scale the response to the situation, and locating incident command as close as reasonably possible. Other considerations include:

- Identify pre-designated staging areas for additional assets and response packages—determine what initially arriving units should be doing, define staging areas and standoff distances, and communicate how all officers should check in.
 - Train, exercise, and use dispatch to assist in scene management. Dispatch is a value-added resource for incident commanders. For example, dispatch can help direct arriving responders to staging/parking areas and help avoid congestion.
 - Establish guidelines on access, parking, and staging vehicles to facilitate the transit of vehicles to the scene, especially large fire vehicles. Post identification of initial size up, ingress/egress routes, and potential staging. Establish procedures for leaving keys in vehicles or having master keys to move vehicles after initial response.
 - Make initial staging decisions consistent with the threat and based on situational awareness. For immediate RTF deployment, staging areas should be unified, integrated, and located as close to the incident as safely possible.
 - Send law enforcement to hospitals to assist in establishing order, providing security, and helping with ambulance traffic.
 - Understand that scene stabilization means something different to each agency and that the local environment and resources best determine optimal approach for a staggered/staged approach.
 - Evacuate living victims as soon as possible to avoid compounding emotional effects.
 - Recognize that response characteristics vary by discipline and plan accordingly, i.e., law enforcement tends to stay off the air, dispatch may ask units to stay off the air, and fire tends to respond as a team of people.
 - Be flexible. Constantly reassess the deployment of assets and be prepared to redeploy as areas of need change.
 - In an ASHE, consider the possibility of multiple related threats and manage response assets accordingly. As a best practice, consider the Multiple Assault Counter-Terrorism Action Capabilities (MACTAC) tactics/approaches that may provide ways to address overconvergence.
 - Develop best practices for use of K9 resources in the response, including use at the staging and command areas, in sanitation/secondary clearing phase with evacuation/clearing team, and witness searching at the collection point.
3. Recognize and plan to address “communications cascade,” which means that as the response progresses, the amount of information that needs to be managed and processed will grow significantly. Accordingly, consider surge and technical support requirements, authenticating large volumes of information, potential crossover to law enforcement and fire/EMS radio

channels or to interoperable channels for direct communications, establishing or transitioning to a communications center. Use encrypted communications when available.

4. For post-incident analysis, develop an after action reporting template for collecting information about ASHE response.
5. Use a Joint Hazard Assessment Team (JHAT) concept, which integrates HAZMAT and bomb technician experts with the response team. This combination of resources can quickly assess ongoing threats and hazards related to an incident and improve the risk assessment process and help ensure a safe response, including force protection at the incident command post and staging areas.
6. Develop and implement ASHE-specific unified incident command boards. Incident command boards are a portable incident scene management tool to help incident commanders organize and management information and resources to support decision making.
7. Create Interagency Liaison Officer (ILO) positions, who are located in a stationary place such as a dispatch or command center. In the UK, ILOs have been used successfully to coordinate communications between the incident commander and law enforcement and fire/EMS responders. They help translate terminology and address gaps in interdisciplinary knowledge and understanding. The ILO is similar in concept to a safety and intelligence officer. Note that the ILO is not considered a substitute for unified or coordinated command in warm zone operations.

Adopt the Rescue Task Force concept.

Many municipalities have adopted the Rescue Task Force (RTF) concept as a multi-disciplinary team that includes law enforcement protection as a method of quickly getting fire/EMS personnel to victims in an ASHE. The RTF concept can be useful for many types of responses as a way to integrate multidisciplinary teams of responders. How the RTF concept is actually used depends on the resources and practices of individual jurisdictions. For example, the ratio of law enforcement officers to fire/EMS personnel and their tactical deployment may vary. Regardless of implementation, everyone should be trained on the RTF concept as part of their first responder role; this training is a recommended best practice that can be adapted to the resources and requirements of individual jurisdictions.

Recommended RTF best practices include the following:

1. Make RTFs operational as soon as tactically possible.
2. Include responders from every discipline in RTF planning, policy development, and response training.
3. When the RTF concept is adopted, all responders should be trained in the concept, and RTF training should be considered a part of a responder's basic skill set. The RTF concept should not be used until all response personnel are trained and prepared, including mutual aid partners from other jurisdictions. Smaller or rural jurisdictions may lack adequate resources to implement the RTF concept safely.
4. Coordinate with law enforcement for team security to provide lifesaving interventions and rapid extraction of victims.
5. Determine optimal team sizes and ratio of law enforcement to fire/EMS personnel with minimum safety standards for team composition. The size and exact composition of the RTF should be at the discretion of the incident commander based on the threats and capabilities of the RTF. Take into account flexibility in the case of injuries or deaths to team members. Recognize that the requirements and resources will not all be the same for all jurisdictions.
6. Make the RTF configurations consistent and train to it, based on department capabilities.
7. Recognize that force protection is not the same as RTF but is part of the RTF concept. Force protection is safety and security of personnel who are operating in a warm or cold zone. Force protection can include other things besides RTF.
8. Establish early face-to-face operational communication, fast command, and joint roll call for personnel accountability.

Challenges to RTF implementation:

- Gaining support from politicians, administrators, and unions.
- Developing common language/terminology and meshing of policies across disciplines.
- Establishing joint, standardized training integrated with other active shooter training/programs.
- Acquiring funding for implementation.
- Integrating communications.
- Understanding and planning for incident transition.

- Overcoming personnel limitations and integrating volunteer organizations.
- Developing education, publications, and presentations to communicate the concept.

Implement Tactical Emergency Casualty Care (TECC).

Tactical Emergency Casualty Care (TECC) is an adaptation for civilian first responders of the highly effective Tactical Combat Casualty Care (TCCC) concept developed by the military during recent combat operations. The goals of TECC include the following (Smith, 2015):

- Establish a evidence-based medical care framework that balances the threat, civilian scope of practice, differences in civilian population, civilian language, protocols, civilian operational constraints, medical equipment limits, and variable resources for all atypical emergencies and mass casualty incidents
- Provide aggressive forward deployment of stabilizing medical interventions
- Provide principles for point of wounding management of trauma in high threat and mass casualty environments
- Provide care guidelines that take into account ongoing threats and facilitate operations that minimize provider risk while maximizing benefits

Summit participants identified initiatives for encouraging adoption of TECC:

1. Proactively promote current civilian agency use of TCCC to transition to TECC (to account for differences in patient population, scope, and civilian operation specifics).
2. Proactively engage with policy makers and senior administrators to increase understanding and support for TECC.
3. Engage high-level medical providers and encourage them to accept the TECC concept (The National Association of State EMS Officials, American College of Emergency Physicians, National Association of EMS Physicians, and local medical directors).
4. Emphasize use of TECC guideline recommendations by both Advanced Life Support (ALS) and Basic Life Support (BLS) providers. The vast majority of TECC medical procedures in early phases of high threat operations are at the BLS level.
5. Engage in proactive public outreach, including first care provider intervention training, and overcome the cultural barriers within the first care provider community by informing and educating a variety of specialty groups/stakeholders (teachers, clergy). Noteworthy examples were identified with the first care provider initiatives in King County (WA), Denver (CO), and in the Commonwealth of Virginia (the Beyond Lockdown program).
6. Emphasize that TECC is scalable and implementation details should be dictated by availability, resources, and agency culture.
7. Clarify the “certification” or instructor credentials for TECC. TECC is a list of guidelines for implementation, **NOT A DEFINED TRAINING OR CERTIFICATION**. The goal is to de-emphasize the need for a standard course. TECC is customizable to local needs and protocols and is best developed and operationalized as an in-house program.
8. Engage TECC practices (to the appropriate scope) across the entire trauma chain of survival concept including first care providers, non-medical first responders, medical first responders, and first receivers.
9. Promote the right intervention at the right time (a TECC concept) per level of provider, scalable to the practices of the agency; i.e., medically, what you should do, when you should do it, and what you do not have to do.

10. Emphasize that high threat medical rescue operations require providers with a high level of fitness and endurance. Emphasize overall fitness and healthy lifestyle choices for operational personnel and increase buy-in among regionally based first responder agencies.
11. Multiple operational deployment models can be applied based on resources and system configuration:
 - Escorted Warm Zone Care (Arlington, VA; Seattle/King County, WA; Philadelphia, PA)
 - Warm corridor (also known as 3 Echo - MN)
 - Police rescue model (e.g., Dallas, TX)
 - Protected island (Hillsborough, OR; Montgomery County, MD)
12. Provide cataloging/profiling of existing programs to allow for best practice matching of agency size/configuration.
13. Define RTF goals as ***rapid point of wounding stabilization at or near the point of wounding and rapid extraction to definitive care.***
14. Encourage dedicating adequate resources, equipment, and training for implementing TECC, including the ergonomic effects of selected equipment and realistic stress inoculation training. In some cases, realistic training may be more important than purchasing equipment.
15. Incorporate TECC concepts into local, regional, and state medical protocols.

Implement Casualty Collection Points (CCP).

TECC guidelines emphasize that in areas of high threat (Direct Threat/Hot Zone and Indirect Threat/Warm Zone), casualty triage should be limited only to categorizing the wounded as ambulatory, wounded, or deceased. Reliance on traditional mass casualty incident methodologies are cumbersome and often over-emphasize categorization in lieu of rapid evacuation.

To better address casualty response, Summit participants identified best practices related to CCP:

1. Emphasize coordination between law enforcement and fire/EMS for triage and CCP operations, resulting in safe evacuation and coordination of ambulatory patients.
2. Make provisions for multiple methods of access and evacuation (traditional, windows, wall breaching, etc.).
3. Focus on patient tracking. Make it logistically and operationally simple, easily scalable, accessible in real time, and available for use by all disciplines. Emphasize that family reunification is a key reason why incident command (IC) needs to know where patients are. Involve hospitals and emergency management in patient tracking operations and integrate considerations of public trust, scene control, and investigation (need for witnesses).
4. Provide joint training on TECC operations and emphasize point of wounding care and rapid evacuation.
5. Keep it simple—limit triage in high-risk areas as previously stated according to TECC guidelines. Triage should never delay evacuation. ***Patients may need to wait on scene for ambulances to arrive, but ambulances should NEVER stage or delay transport when patients are available.***
6. Patients should be evacuated out of the warm zone as swiftly as possible.
7. Emphasize that by-the-book CCP operations are not required and can be adjusted to the tactical situation and resource availability.
8. Plan procedures for simple high visibility marking of fatalities to prevent redundant evaluation by responders.
9. Consider the following in regards to marking fatalities:
 - Some form of standardization and education among disciplines.
 - Procedures that take into account the perception of a fatality marking system, the dignity of victims and patients, and patient and fatality movement that is the least disruptive to crime scene/forensics methods.
 - Simple-to-apply procedures that are easily understood by all first responders, highly visible and durable, and non-controversial.
 - Whatever means are chosen to mark fatalities, this information is considered law enforcement sensitive. Public release of this information could have direct tactical consequences for first responders.

Develop and communicate evidence-based guidelines for fire/EMS ballistic protective equipment.

Ballistic protective equipment (BPE) is important for all first responders. However, it is not universally issued for fire and EMS first responders. Research-based guidelines would assist the fire and EMS communities with making more informed decisions on when to use and what to use in equipping personnel.

1. Establish, publish, and distribute criteria for the use and need of ballistic equipment that includes these considerations:
 - Not “you should wear” but rather “if you decide to wear.”
 - Any criteria development must solicit input from all stakeholders (law enforcement and Fire/EMS).
 - Good escorted warm zone Tactics, Techniques, and Procedures. (TTPs) may mitigate need for ballistic equipment.

Ballistic Protective Equipment Best Practices for Fire/EMS (Among Summit Participants)	
Charlotte, NC	No ballistic protection
Arlington, VA	Level 3A rifle plates and ballistic helmets
Las Vegas, NV	Heavy gear (plates and ballistic helmets)

2. TECC medical equipment should be prioritized over ballistic equipment, such that lack of ballistic equipment does not preclude ASHE-related fire/EMS warm zone operations.

How to overcome possible challenges:

- For funding BPE, communicate catalog options, push for upstream policy changes to overcome funding limitations for ballistic equipment for fire/EMS, and consider alternate resources.
- Through education and communication, increase knowledge of PPE by using the *IAB Guidance for Non-Law Enforcement Ballistic Protection* and interaction with local law enforcement to address misconceptions about the level of protection required.

Establish evidence-based guidelines and education for medical and rescue equipment.

First responders need to understand the most effective uses of up-to-date equipment and under what circumstances to employ those tools. Summit participants outlined these best practices based on actual incident experiences:

1. Emphasize lifesaving interventions and rapid extraction as the **ONLY** required medical interventions in high-threat areas.
2. Limit equipment to that defined by TECC.
3. Include scientifically validated characteristics, not named products (no specific product endorsements).
4. Balance training and operational goals against acquisition of equipment.
5. Forward deploy readily available equipment/gear.
6. Issue individual first aid kits to law enforcement officers.
7. Utilize ergonomic, multiple patient bag for RTF operations.
8. In public spaces (malls, schools, and stores) first care provider kits should be visible and in easy-to-access locations.
9. Consider the benefits of regional standardization for increased buying power and facilitating interoperability.
10. Cross-train within interoperable agencies if different equipment is employed.

How to overcome possible challenges:

- Emphasize that the equipment and skills being suggested have value in any type of emergency response, for example tourniquets can save lives in a non-ASHE event.
- Review published, shared studies and data to confirm anecdotal beliefs and industry claims related to equipment.
- Create evidence-based guidelines and education to address state and local medical oversight resistance and misunderstanding.
- Emphasize and communicate how routine first response equipment can be used in an ASHE response versus specialized, limited-use gear.
- Evaluate resources for alternate funding sources.

Promote two-way public communication as an essential component of effective ASHE response.

Recent events have demonstrated the public can and should have a role in preparedness and response. The public is the real first responder and can be a valuable resource. In the active shooter context, it is essential to promptly and effectively communicate critical incident information and clear instructions on the proper public response. Best practices in public communication identified at the Summit include the following:

1. For increased situational awareness, information should be shared among all stakeholders, including the public.
2. Everyone should be considered a first care provider.
3. Establishing both multidisciplinary support for training the public in what to do during an ASHE and partnerships with public and private entities for training and education, to include hemorrhage control equipment in public places.
4. Public messaging has to be addressed by the incident command.
 - Understand the information platforms available.
 - Push information out. If not, the public and others will fill in the blanks. Tell the public what they need to do. Convey basic factual information, without speculation.
 - Control information and messages. Consistent messaging between agencies helps establish and keep public trust and confidence in the response.
 - Establish methods and plans for public information.
 - Develop a communications plan and train and exercise to this essential component of response.

References

- Blair, J. P. and Schweit, K. W. (2014). *A Study of Active Shooter Incidents, 2000–2013*. Washington, DC: Texas State University and Federal Bureau of Investigation, U.S. Department of Justice.
- Smith, E. R. (2015, March 17). *Changing the Paradigm: Tactical Emergency Casualty Care for High Risk Medical Operations*. In *Active Shooter Summit*, conducted at the meeting of the InterAgency Board, Charlotte, NC.