About the Author

Steven Crimando is the Principal of Behavioral Science Applications, a training and consulting firm focused on human factors in crisis prevention and response. Mr. Crimando is a Board Certified Expert in Traumatic Stress (BCETS), and holds Level 5 Certification in Homeland Security (CHS-V). He serves as a consultant and trainer for many multinational corporations, government agencies, major city police departments and military programs. Mr. Crimando was deployed to the 9/11 and 1993 World Trade Center attacks, as well as New Jersey’s anthrax screening center, and other acts of international terrorism. He is an Advisor to the Morris County Active Shooter Rescue Force, and has an extensive background in EMS and emergency management.
The Changing Face of Mass Violence

The vehicular terrorist attacks in Barcelona and Cambrils, Spain, followed almost immediately by a vicious knife attack in Turku, Finland, left 16 dead and more than a hundred injured within two days’ time. A house explosion farther down the coast in Alcanar, Spain drew authorities to a location where large and sophisticated bombs were in production. Each of these events has been labeled as terrorism, with ISIS taking credit. There has been a dramatic uptick in this type of mass violence, along with the development of newer types of improvised explosives that have impacted aviation security. Terrorists bent on creating mass casualty events seem to have no limits to their creativity. As quickly as security forces become more adept at detecting and deterring terrorist plots, the perpetrators of these attacks adapt to their tactics.

In the English-language magazine, Rumiyah, ISIS instructed followers to use vehicles in operations, stating, "Vehicles are like knives, as they are extremely easy to acquire [and] . . . arouse absolutely no doubts due to their widespread use throughout the world." Without raising suspicion, vehicles are easily owned, rented, borrowed or stolen; they have become the poor man's weapon of mass destruction. A full-page photograph of a Ford pickup truck appeared in al-Qaeda’s Inspire magazine, under a banner calling the vehicle the "ultimate mowing machine."

A review of terrorist vehicle attacks over the last 10 years shows an increase in the use of this tactic and related casualties. Homeland security and intelligence agencies believe that homegrown violent extremists (HVEs) will likely continue using vehicles as weapons as terrorist organizations are actively promoting this tactic, along with follow-up knife attacks, based upon the success of past attacks, and the ease of vehicle acquisition.

*As of August 10, 2017. These numbers are derived from the vehicle ramming portion of these attacks. Graphic developed by the New Jersey Office of Homeland Security and Preparedness.
From instances where the weapon of choice has been a vehicle, firearm or explosive, a new template for mass violence has emerged. In the days following the Orlando nightclub attack in June 2016, the Al Qaeda in the Arabian Peninsula (AQAP)’s propaganda wing produced a 4-page guide that praised the Orlando shooter and claimed that his attack provided the template for other true believers to follow. Relative to other AQAP publications, there were two significant shifts in the rhetoric typical the online magazine. The first instruction was to now consider all American citizens as the “Combatant Public,” and to target the general population in large “general gatherings.” This call to action against all U.S. citizens gathered in large numbers has helped fuel the increase in vehicle attacks at outdoor events and popular tourist locations, and sets forth the recipe for future mass violence incidents. Previous calls to action by the Inspire magazine have called upon followers to use any means of violence at their disposal, including vehicles, fire and edged weapons. This attack method is not exclusive to foreign terrorist organizations. In what is being called an act of domestic terrorism, a vehicle strike was also the cause of death in Charlottesville, Virginia during violent clashes between protest groups.

Given the directives from terrorist groups, and the proven effectiveness of these tactics, the potential for these acts of mass violence, as well as Hybrid Targeted Violence is likely escalating. Every emergency manager should be aware and alert of these trends. Of course, other forms of mass violence, such as Active Shooter incidents are still part of the mix and must also remain on our radar, increasing our need to be prepared for these complex incidents.

**New Attack Models: Hybrid Targeted Violence (HTV)**

The term “Hybrid Targeted Violence” describes complex acts of mass violence that can involve multiple attackers in multiple locations using multiple methods and means of attack. Attacks of this type may use a blend of conventional and non-conventional weapons and tactics. On top of conventional attack methods, such as shooting and bombing, planners must also anticipate vehicular attacks combined with these other tactics as demonstrated in Nice, London and Cambrils. The authors of the HTV concept, Tracy Frazzano and Matthew Snyder, explain that these attacks involve:

- Well-trained, tactically competent, and willing-to-die perpetrators.
- Multiple operators working in small tactical units.
- Effective internal and external communications/coordination.
- Purposefully luring first responders to inflict even more carnage.
- The use of fire to complicate first-responder operations and cause further damage.
The potential use of CBRN agents
Use of high-powered military type weapons and explosives, including suicide bomb vests.

The attacks in San Bernardino, Paris and Belgium, as well as other historic incidents of mass violence, such as the sieges in Beslan, Mumbai, and the Westgate shopping mall in Nairobi, demonstrates that Hybrid Targeted Violence is not exactly new or unheard of in the U.S. or abroad. Intelligence estimates show that international extremist groups are very interested in initiating, supporting and inciting this kind of attack on American soil.

Strategic Guidance

Even the thought of managing the response to an act of mass violence can seem overwhelming. From the attackers’ point of view, that is the goal—to overwhelm response capabilities and further their intention of creating a sense of powerlessness and vulnerability. The terrorist’s playbook is open; we have seen the game plan and have developed some plays ourselves to prepare for what are meant to be dangerous mass casualty events. In September 2015, the InterAgency Board published its guide: “Improving Active Shooter/ Hostile Event Response: Best Practices and Recommendations for Law Enforcement, Fire and EMS.” A few months earlier, the U.S. Department of Homeland Security released First Responder Guide for Improving Survivability in Improvised Explosive Device and/or Active Shooter Incidents.” Both of these documents should be on every emergency manager’s bookshelf. Together they provide a comprehensive approach to complex mass violence events that can aid in the development of policies, plans and exercises.

The InterAgency Board has identified a number of priorities that are particularly useful in developing an approach for managing the challenges associated with acts of mass violence. These priorities include:

1. Ensuring that leadership prioritizes and supports the development and implementation of proactive ASHE-relevant joint policies, procedures, training, exercises, and equipment.

2. Integrating and improving coordinated pre-event law enforcement, fire, and EMS policy development, planning, training, and exercises.

3. Creating and implementing a common operating language.

4. Integrating and improving coordinated command and incident management across all responder disciplines.
5. Adopting the Rescue Task Force concept.

The Hartford Consensus and Rescue Task Force Model

Shortly after the tragic Active Shooter incident in Newtown, CT, the American College of Surgeons (ACS) convened a Joint Committee to create a national policy to enhance survivability from intentional mass casualty and active shooter events in collaboration with the medical community, leaders from federal government, the National Security Council, the U.S. military, Federal Bureau of Investigation, and other governmental and nongovernmental emergency medical response organizations. The four reports produced by this effort are known collectively as “The Hartford Consensus.”

Lessons learned in combat in Iraq and Afghanistan, as well as civilian Active Shooter incidents, clearly point to the importance of bleeding control as a critical element of survivability. In studying casualties in mass shooting it becomes clear that the most common cause of preventable death in a mass shooting incident is the failure to control severe bleeding. The outcome of the ACS effort was the recommendation to adapt Combat Casualty Care techniques to civilian EMS responders as Tactical Emergency Casualty Care.

A Rescue Task Force (RTF) is a specialized team within a jurisdiction’s EMS agency that is trained and equipped to initiate bleeding control and other critical life-saving measures in the “warm zone” of an active shooter or mass violence incident. In prior iterations of active shooter response, EMS would wait for the wounded to be moved by law enforcement responders to “casualty collection points” in the cold zone, safely out of the active threat environment. It is well established that the priority for incoming law enforcement personnel is to locate and stop the shooter(s). As such, the wounded would be left in the “warm zone” after the shooter and responding police moved through, and attended to after the shooting had stopped. Severe blood loss resulting from shooting injuries results in people potentially bleeding out in 2-3 minutes. Obviously waiting for victims to be moved to the “cold zone” for treatment resulted in a loss of life.

Members of a RTF are trained and equipped to operate in the “warm zone” under the cover of armed law enforcement officers. The RTF operators are not armed, but they are “hardened” in ballistic helmets, vests and other protective equipment. By treating patients in place with tourniquets, combat gauze, chest seals and airways, additional lives may be saved. The development of a RTF in any community involves the development of inter-domain (EMS, Fire, Law Enforcement) training in tactics, techniques, and procedures - including ballistic gear, better situational awareness, and application of concealment and cover concepts for RTF members. Setting up such a specialized EMS
team also requires a high degree of coordination between EMS, Fire, and Law Enforcement to work more effectively during IED and/or active shooter incidents.

**Leveraging Bystander Intervention**

In nearly every mass casualty scenario imaginable, civilian bystanders are likely to be the initial first responders. Active Shooter incidents and other acts of mass violence are some of the very few crimes in which law enforcement agencies count on civilian intervention. As such, the U.S. Department of Homeland Security has developed the "Stop the Bleed" campaign to prepare average citizens to take on the role of initial first responders to assist until professional emergency responders arrive. Some organizations have also started to introduce basic B-CON training and have begun prepositioning B-CON supplies in safe rooms and other points likely to experience casualties. Wall-mounted Kits, Carry-Kits and Throw Kits are designed to provide bystanders and initial first responders with quick and easy access to essential medical equipment for stopping life-threatening bleeding.

No matter how rapid the arrival of professional emergency responders, bystanders will always be first on the scene. It is important to leverage this resource to save lives and reduce both the physical and emotional trauma that may arise for those standing helplessly nearby watching a neighbor or co-worker suffer and die simply because they had no awareness, knowledge or skills to help save a life. Developing trained and ready Rescue Task Force teams, supplemented by civilians knowledgeable in B-CON, are important elements to address the serious injuries that may result from an attack in a crowded public place or gathering.

**The Critical Nature of Crisis Communications: Action Binds Anxiety**

The initial phase of an act of mass violence is likely to be characterized by chaos. Crisis communications expert Peter Sandman summarized the need for information and direction during a crisis with the memorable phrase, "Action binds anxiety." Giving people clear information about the nature and severity of the hazard at hand, what to do, and how to do it, is critical to facilitating an effective response to an emergency. In an active shooter event, emergency management authorities now encourage the use of "clear text" in crisis messaging, rather than codes that may be confusing or unclear. The response curve in a mass violence incident is extremely steep. There is little time for discussion or clarification. Any information to be shared in such an emergency must be ready to launch at a moment's notice. Templates and pre-developed crisis messages must be at the fingertips of those charged with initiating alerts and notifications. Crisis communications
technologies and mass notification systems must have redundant capabilities so they can simultaneously blast out messages via different channels, such as SMS, voice and email.

The very best way to thwart the perpetrators of mass violence is to deny them their targets. Rapid, accurate communications can help get people out of harm’s way and mitigate the impact of an attack. Access to information in the immediate wake of an attack can also reduce the potential for a stampede or “escape mob” that can result in additional injuries and deaths.

Picking the right tactical approach and right communication tools, providing the right training and equipment, and promoting the idea that everyone is a potential first responder, can put individuals, organizations and communities in a much better position to survive a sudden, shocking violent event.

**Lessons Learned: New Recommendations**

In May 2017, the Association of State and Territorial Health Officials (ASTHO) published an important report, “The June 12, 2016 Pulse Nightclub Shooting in Orlando, Florida: A Peer Assessment of Preparedness Activities’ Impact on the Public Health and Medical Response.” This 13-page report summarizes the public health and medical preparedness activities that supported the response to the June 12, 2016, Pulse nightclub shooting in Orlando, Florida. It also explores preparedness program gaps brought to light during the response. A team collected information on the impact of the Assistant Secretary for Preparedness and Response’s Hospital Preparedness Program (HPP) on the overall preparation and response to this mass casualty/mass fatality event to highlight how HPP contributed to successes and challenges before, during, and after the event. Some of the lessons learned shared in the report include:

- The understanding that mass casualty incidents will have long-lasting impacts. Responders should plan for continued care of patients within the hospital, families and friends, and have strategies for how to deal with the media, VIPs/dignitaries, donations, and security posture changes.
- The importance of access to funding to regularly plan with and conduct exercises with local partners across the region to aid in the ability to coordinate and support public health and medical emergencies.
- The importance of anticipating the needs of the responders. Employee Assistance Program counseling needs may last for several years, depending on
the type of incident. These services should be built into the response plan, particularly for a mass casualty event.

- The need to anticipate additional resources. A variety of needs may arise during a response, such as interpreters for non-English speaking families at Family Reunification Centers (FRC) and hospital emergency departments.
- Planning to support Family Assistance Centers (FAC) and victim identification services.
- Developing strategies for identifying additional space for a FRC and FAC. All jurisdictions should be encouraged to identify additional space for a FRC or FAC and work through how badging, donations and goods, and security inside and outside the building will be handled.

**The Next Attack is Underway**

Although the first shot has not been fired, and there are no crowds clamoring to escape a vehicular attack, the planning phase for the next act of mass violence is underway somewhere. It is critical that emergency managers and first responders remain current about the ever changing threat landscape and new approaches to respond quickly and effectively to these attacks. Mass coordination and mass communication are our best tools in the face of the evolving threat of mass violence.
About Everbridge

Everbridge, Inc. (NASDAQ: EVBG) is a global software company that provides enterprise software applications that automate and accelerate an organization’s operational response to critical events in order to keep people safe and businesses running. During public safety threats such as active shooter situations, terrorist attacks or severe weather conditions, as well as critical business events such as IT outages or cyber-attack incidents, over 3,400 global customers rely on the company’s SaaS-based platform to quickly and reliably aggregate and assess threat data, locate people at risk and responders able to assist, automate the execution of pre-defined communications processes, and track progress on executing response plans. The company’s platform sent over 1.5 billion messages in 2016, and offers the ability to reach over 200 countries and territories with secure delivery to more than 100 different communication devices. The company’s critical event management and enterprise safety applications include Mass Notification, Incident Management, IT Alerting, Safety Connection™, Community Engagement®, Visual Command Center®, Crisis Commander® and CareConverge™, and are easy-to-use and deploy, secure, highly scalable and reliable. Everbridge serves 8 of the 10 largest U.S. cities, 8 of the 10 largest U.S.-based investment banks, all four of the largest global accounting firms, all 25 of the 25 busiest North American airports and 6 of the 10 largest global automakers. Everbridge is based in Boston and Los Angeles with additional offices in San Francisco, Lansing, Beijing, London and Stockholm. For more information, visit www.everbridge.com, read the company blog, and follow on Twitter and Facebook.


