# Improving survival from active shooter events: The Hartford Consensus

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The recent mass casualty shooting events in the United States have had a profound effect on all segments of society. The medical, law enforcement, fire/rescue, and EMS communities have each felt the need to respond. It is important that these efforts occur in a coordinated manner to generate policies that will enhance survival of the victims of these events. Such policies must provide a synchronized multi-agency approach that is immediately available within the communities affected by such tragedies.

The American College of Surgeons brought together senior leaders from all the aforementioned disciplines to produce a document that will stimulate discussion and ultimately lead to strategies to improve survival for the victims. A day-long conference on April 2, 2013, in Hartford, Connecticut obtained input from medical, law enforcement, fire/rescue, EMS first responders, and military experts. The conference relied upon data and evidence from existing military and recent civilian experiences, and was sensitive to the multiple agencies that play a role in responding to mass casualty shootings. The meeting, known as the Hartford Consensus Conference, produced a concept paper entitled "Improving Survival from Active Shooter Events." The purpose of this document is to promote local, state, and national policies to improve survival in these uncommon, but horrific events. The following short essay describes methods to minimize loss of life in these terrible incidents.

## STATEMENT OF THE PROBLEM

Active shooter/mass casualty events are a reality in modern American life. As our experience with these events has accumulated, it has become clear that long-standing practices of law enforcement, fire/rescue, and EMS responses are not optimally aligned to maximize victim survival. Using existing tactics and evolving trauma concepts, the means of improving survival already exist, but have been underutilized. Now is the time to apply these lessons to active shooter events. While efforts to isolate or stop the active shooter remain paramount, early hemorrhage control is critical to improving survival.

# EARLY HEMORRHAGE CONTROL TO IMPROVE SURVIVAL

The response to shooting events has historically involved a segmented, sequential public safety operation—first focused on law enforcement goals (stop the shooting), followed by the remainder of the incident response and recovery. As we go forward, initial actions to control hemorrhage should be part of the law enforcement response and knowledge of hemorrhage control

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needs to be a core law enforcement skill. Maximizing survival requires an updated and integrated system that can achieve multiple objectives simultaneously.

Life threatening injuries in active shooter incidents such as those in Fort Hood, Tucson, and Aurora are similar to those encountered in combat settings. Military experience has shown that the number one cause of preventable death in victims of penetrating trauma is hemorrhage. Tactical Combat Casualty Care (TCCC) programs, when implemented with strong leadership support, have produced dramatic reductions in preventable death. Recognizing that active shooter incidents can occur in any community, the Hartford Consensus encourages the use of existing techniques and equipment, validated by over a decade of well-documented clinical evidence.

The Hartford Consensus recommends that an integrated active shooter response should include the critical actions contained in the acronym **THREAT**:

- 1. Threat suppression
- 2. *Hemorrhage* control
- 3. Rapid Extraction to safety
- 4. Assessment by medical providers
- 5. *Transport* to definitive care

While some may view the addition of hemorrhage control skills as yet another training requirement in times of constrained financial resources, the concepts are simple, proven, and relatively inexpensive; they have already been adopted as best practice by many law enforcement agencies. Life threatening bleeding from extremity wounds is best controlled initially through the use of tourniquets, while internal bleeding resulting from penetrating wounds to the chest and trunk is best addressed through expeditious transport to a hospital setting. Optimal response to the active shooter includes identifying and teaching skill sets appropriate to each level of responder without regard to law enforcement or fire/rescue/EMS affiliation. THREAT incorporates the proven concepts of self-care and buddy-care.

#### **INTEGRATED RESPONSE**

Care of the victims is a shared responsibility between law enforcement, fire/rescue, and EMS. Optimal outcomes depend on communication between public safety responders. The response to an active shooter event is a continuum that requires coordination between law enforcement and the medical/ evacuation providers. Such coordination includes:

- Shared definitions of terms used in mass shooting events.
- Jointly developed local protocols for responding to active shooter events.
- Inclusion of active shooter events in table-top and field exercises to improve familiarity with jointly developed protocols.

### CONCLUSION

The Hartford Consensus seeks to improve survival from active shooter events. The use of THREAT and a more integrated response by law enforcement fire/rescue, and EMS offers communities a mechanism to minimize loss of life in these incidents.

#### DISCLOSURE

The authors declare no conflicts of interest.