Medical Response to Bombings: The Application of Lessons Learned to a Tragedy

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s the recent event in Boston demonstrated, injuries from explosive materials due to terrorism are a constant threat; they happen worldwide; and they present unique triage, diagnostic, and management challenges. The Boston Marathon, a well-known international race intended for fun, competition, and celebration, was quickly turned into a field triage area for the care and transport of mass casualty victims. The rapid intervention and care of the injured shown by the police, first responders, Emergency Medical Services (EMS), and Boston-area hospitals certainly saved lives and maximized outcomes for the victims. But the coordination of these public safety and health professionals that we saw was not merely a result of the usual training received for the care of the injured. It was an outgrowth of lessons learned from other mass casualty events (such as occurred in New York City, Madrid, London, and Mumbai) and the establishment of a cooperative agreement between the Centers for Disease Control and Prevention (CDC) and its partners to respond to the urgent, ongoing need to develop, disseminate, and exchange information about injuries from terrorism. This cooperative effort, begun in 2005, was known as the Terrorism Injuries Information, Dissemination and Exchange (TIIDE) Project.¹

Before TIIDE, acute care, emergency medical, and public health systems in many states and communities were poorly integrated, with separate infrastructures functioning independently of one another. Through TIIDE, relationships among those organizations were strengthened to improve public health and safety, clinical management, and health care system preparedness. TIIDE facilitated the collaboration of national organizations of professionals in acute medical care, trauma, and EMS with state and local public health programs and the CDC to efficiently and effectively respond to mass casualty events resulting from terrorism.

These efforts included the dissemination of key material, such as a national standardized field triage protocol for mass casualty events,² a training manual and clinical primer for the types of injuries to expect and how best to care for the victims, fact sheets on

blast injuries,^{3,4} and helping health care providers translate injury care from the military to the civilian sector including standardized medical curricula for training law enforcement personnel.⁵

Another key goal of the TIIDE partnership was to learn from the international community and from model communities within the United States. In 2005, representatives from 9 countries with recent terrorist bombings (Australia, Colombia, Iraq, Israel, United Kingdom, United States of America, Spain, Saudi Arabia, and Turkey) came together to share their experience with terrorist bombings.⁶ In 2006, seven communities from across the United States were competitively selected as best practice models to share their experiences for emergency EMS and public health interoperation.⁷ Boston was one of those model communities. The coordination and rapid response demonstrated during this tragic event was testimony to the importance of continual training, reassessment, sharing lessons learned, and disseminating that information to others.

Improvised explosive devices such as those used in the Boston Marathon bombing have become the weapon of choice for terrorists around the world, and it is likely that these weapons will continue to be used in terrorist attacks for decades to come.⁸ This growing use of explosive devices by terrorist groups underscores the importance of projects like TIIDE, and we hope that projects of this kind continue to be supported.

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