What Happens After the Shooting?

TCAA Position Statement on Traumatic Injury by Firearm
Ensuring Access to Trauma Care Services For Victims of Traumatic Injury

Close and Proximate Trauma Care Saves Lives

News headlines of late have been filled with the stories of the horrific tragedies in Tucson, Aurora and Newtown. In Tucson, the survival and recovery of 13 of the 19 of the victims demonstrates the life-saving value of trauma care. The organized trauma care system in place in Tucson and Aurora – from the EMS first responders to proximate trauma centers - played a significant role in the survival for many of the victims.

Had the Tucson and Aurora shootings occurred in the many geographic regions of this nation where there is not proximate access to trauma care, the outcomes may have been very different. Unfortunately, according to the Centers for Disease Control, nearly 45 million Americans lack access to a Level I or II trauma center within one hour of being injured -- that is equal to the populations of Arizona, New Mexico, Texas, Louisiana, Mississippi and Alabama combined.

Close and proximate trauma care can mean the difference between life and death for victims of traumatic injury. The ability to deliver trauma care services -- comprehensive specialized treatment to victims of blunt force or penetrating injuries - within an hour of injury is critical to survival. In fact, in the United States, approximately 35 million people are treated every year for traumatic injuries[i] -- which includes one hospitalization every 15 minutes. Traumatic injury is the leading cause of death under age 44.[ii] And, at an annual cost of $67.3 billion, trauma is the 3rd most costly medical condition (behind heart disease ($90.9b) and cancer ($71.4b)).[iii]

Key to the effective and efficient delivery of trauma care services are the existence of trauma centers and the highly specialized physicians, nurses and trauma teams who staff them. Trauma centers invest millions of dollars each year to ensure the immediate availability of up to 16 subspecialist physicians and a significant supporting clinical infrastructure. While costly, trauma care is highly effective. The risk of death for a severely injured trauma patient treated at Level I Center is 25% less than in a non-trauma center hospital.

Relationship between Trauma and Firearms

Trauma centers care for patients with a variety of mechanisms of injury. Falls constitute the highest percentage mechanism of injury at 40%, yet only 3.28% of such injuries are fatal. Motor vehicle accidents constitute 28% of the mechanism of injury, with 4.35% being fatal. However, while firearms constitute only 4.35% of the mechanism of injury, they constitute the highest percentage of fatalities -- 16.12% are fatal. The resources required to treat victims of traumatic injury by firearm, often with multisystem injuries or substantial injury severity (>ISS 15), are often substantially more intensive.

In a December 2012 Wall Street Journal article, it was noted that the reported number of people treated for gunshot attacks has nearly doubled from 2001 to 2011 but that the percentage of shooting victims dying was lowered.

Ensuring Access to Trauma Care

Trauma centers save lives every day for those fortunate enough to have access to them. In addition, many centers struggle to keep their doors open -- from 1990-2005, 30% of trauma centers closed, with a disproportionate adverse impact on access for vulnerable populations.[iv] The primary reason for trauma center closure is a lack of funding.[v]

Equally essential is the development of trauma and regionalized EMS systems of care that ensure that severely injured or ill patients are transported to the right trauma center in the right amount of time. Only 8 states have fully developed trauma systems and few areas of the nation have coordinated regionalized systems of emergency care, as called for by the IOM in its landmark 2006 study, *Emergency Medical Services: At the Crossroads*, which documented a fragmented and disjointed state of EMS in America.

Position of the Trauma Center Association of America

- The trauma programs in the Public Health Service Act are designed to maintain and improve access to trauma care services as part of a well-designed trauma care system. These programs should be fully funded to ensure that all Americans have access to life-saving trauma care where and when they need it.

- If the Congress opts not to fund the trauma programs through the annual appropriations process, the Congress should institute a different mechanism of funding such as through user fees for individuals undertaking activities that may result in traumatic injury such as purchase of a firearm or use of a motor vehicle.

- Their reauthorization should be accomplished on a timely basis in 2014.

- Medicare payment for trauma care provided to victims of traumatic injury by trauma centers should be evaluated and redesigned to promote high quality and value.

Table 18

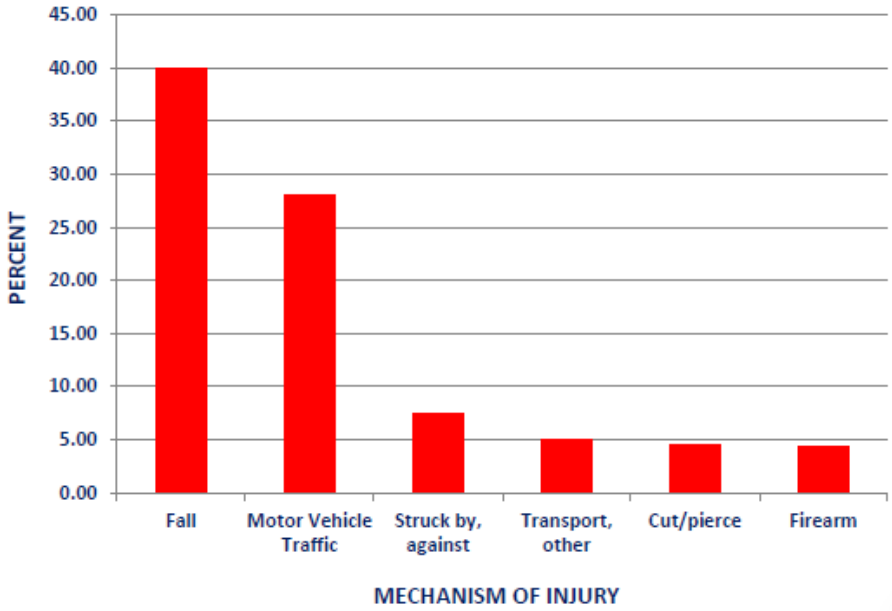
Incidents by Mechanism of Injury

MECHANISM	NUMBER	PERCENT	DEATHS	CASE FATALITY RATE
Fall	309,543	40.03	10,162	3.28
Motor vehicle traffic	216,787	28.03	9,425	4.35
Struck by, against	57,594	7.45	630	1.09
Transport, other	38,602	4.99	846	2.19
Cut/pierce	35,193	4.55	667	1.90
Firearm	33,649	4.35	5,425	16.12
Pedal cyclist, other	14,342	1.85	163	1.14
Other specified and classifiable	13,070	1.69	496	3.79
Hot object/substance	8,815	1.14	41	0.47
Unspecified	8,540	1.10	319	3.74
Fire/flame	8,457	1.09	467	5.52
Machinery	7,833	1.01	96	1.23
Natural/environmental, bites and stings	4,608	0.60	19	0.41
Other specified, not elsewhere classifiable	3,804	0.49	58	1.52
Natural/environmental, other	2,951	0.38	65	2.20
Overexertion	2,595	0.34	9	0.35
Pedestrian, other	2,563	0.33	148	5.77
Suffocation	735	0.10	188	25.58
Drowning/submersion	399	0.05	63	15.79
Poisoning	294	0.04	12	4.08
Adverse effects, medical care	147	0.02	7	4.76
Adverse effects, drugs	118	0.02	4	3.39
NK/NR	2,660	0.34	98	3.68
Total	773,299	100.00	29,408	3.80

American College of Surgeons
Inspiring Quality:
Highest Standards, Better Outcomes

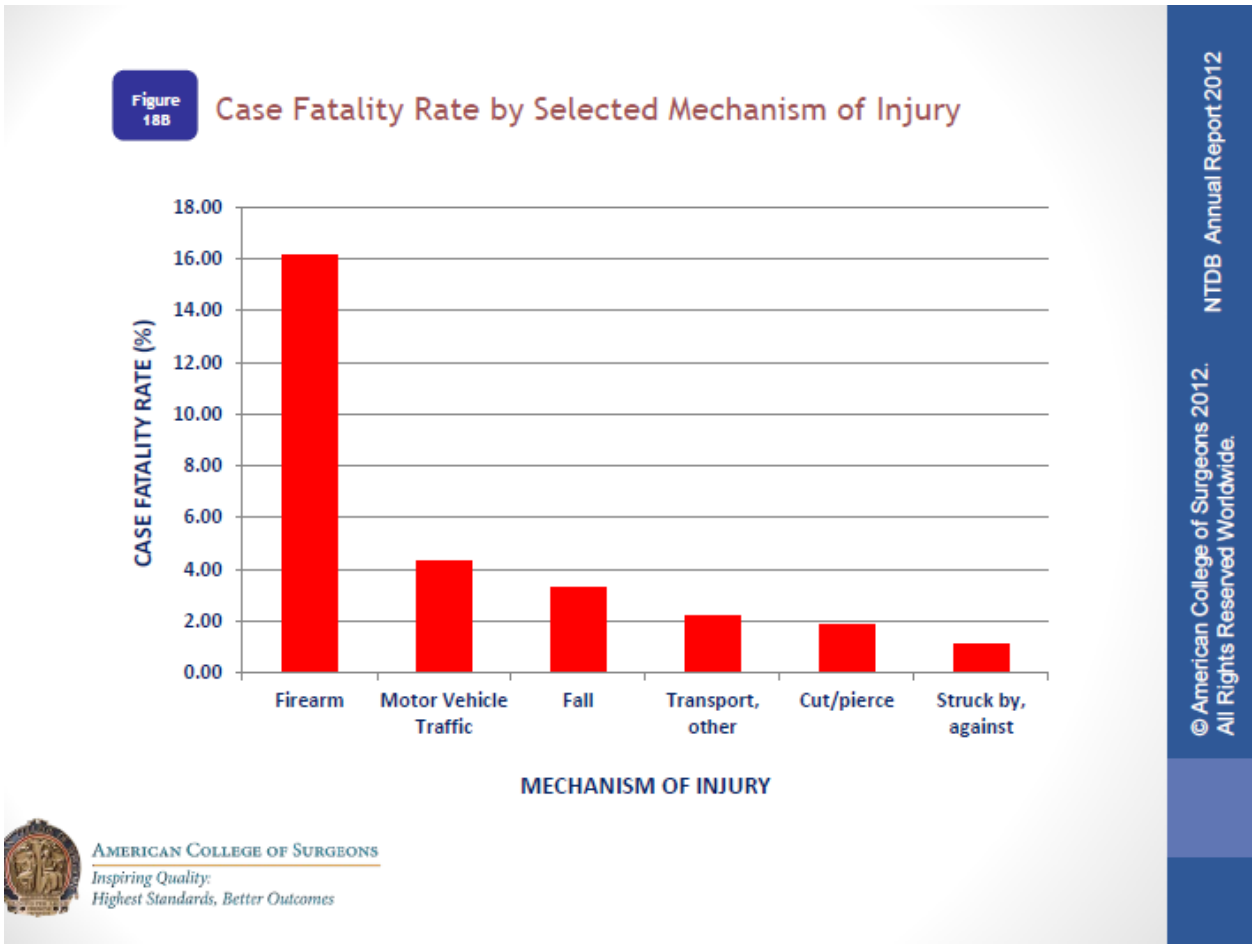
Figure 18A

Incidents by Selected Mechanism of Injury



American College of Surgeons
Inspiring Quality:
Highest Standards, Better Outcomes

NTDB Annual Report 2012



[i] National Trauma Institute. www.nationaltraumainstitute.com.
[ii] Centers for Disease Control and Prevention, *Injury Prevention & Control: Trauma Care*, available at www.cdc.gov/traumacare.
[iii] Anita Soni, *Top 10 Most Costly Conditions among Men and Women, 2008: Estimates for the U.S. Civilian Noninstitutionalized Adult Population, Age 18 and Older*, Agency for Healthcare Research and Quality Statistical Brief #331 (July 2011), *available at* http://meps.ahrq.gov/mepsweb/data_files/publications/st331/stat331.shtml.
[iv] Renee Yuen-Jan Hsia and Yu-Chu Shen, *Rising Closures of Hospital Trauma Centers Disproportionately Burden Vulnerable Populations*, HEALTH AFFAIRS, Vol. 30, No. 10 (2011).
[v] Id.