



## Trauma Centers: An Essential Part of the National Public Health Infrastructure

*Trauma Centers Offer a Heightened Level of Care That Is Not Always Available in Emergency Rooms and Maintain Resource-Intensive Specialists and Services 24/7 to Treat and Stabilize Critically Ill Patients*

### Importance of Trauma Centers:

Trauma is the leading cause of death for individuals under 46 years old and the third leading cause for all ages.<sup>i</sup>

Mortality decreases when trauma victims are treated in a trauma center compared to a non-trauma center.<sup>ii</sup>

One in five trauma-related deaths could be prevented with effective and optimal trauma care.<sup>iii</sup>

Trauma is a major public health issue that affects individuals of all ages. In the United States, approximately 37 million individuals are treated each year for traumatic injuries in an emergency department (ED),<sup>iv</sup> resulting in 2.6 million hospitalizations.<sup>v</sup> Almost 10 percent of all ED visits are due to falls among elderly Americans.<sup>vi</sup>

The personal and societal costs of trauma are staggering: the nationwide annual cost of trauma is estimated to be \$670 billion, accounting for direct and indirect costs, such as lost work productivity.<sup>vii</sup> This figure includes the \$29 billion Medicare pays annually for non-fatal fall injuries.<sup>viii</sup>

Given the prevalence of traumatic injuries, trauma centers are a critical piece of our country's public health infrastructure. Trauma centers are specialized facilities that treat critically injured patients and play a vital role in leading the response to disasters and other mass casualty events. They have special equipment and teams of healthcare professionals, including surgeons and emergency physicians, nursing and allied healthcare professionals, who are trauma trained to deliver immediate, critical care to address all types of penetrating and blunt injuries. For most levels of care, operating rooms must be available within minutes, and trauma surgeons and their teams must be either on-site or available to care for patients facing life or limb disasters.

Trauma centers have unique, fixed, and resource-intensive costs to maintain their verification, designation, or license. For example, level one and level two trauma centers must have, among other requirements, the following to achieve certification from the American College of Surgeons:

- Operating rooms staffed and ready within 15 minutes;
- Continuous 24/7/365 trauma surgery coverage;
- Have life-saving equipment immediately available such as cardiopulmonary bypass equipment; and
- Continuous 24/7/365 availability of neurosurgeons, orthopedic surgeons, critical care physicians, cardiothoracic surgeons, vascular surgeons, hand surgeons, plastic surgeons, obstetrics/gynecological surgeons, otolaryngological surgeons, and urology surgeons.

Lower-level trauma centers must have trained staff that are prepared to stabilize and transfer these critically ill patients to higher-level facilities.

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<sup>i</sup> The National Academies of Science, Engineering, and Medicine, *A national trauma care system: Integrating military and civilian trauma systems to achieve zero preventable deaths after injury* (2016), <https://nap.nationalacademies.org/read/23511/chapter/5#44>.

<sup>ii</sup> Rayan Jafnan Alharbi, et al., *The Effectiveness of trauma care systems at different stages of development in reducing mortality: A systematic review and meta-analysis*, 16 *World J. of Emergency Surgery* (July 2011), <https://wjeb.biomedcentral.com/articles/10.1186/s13017-021-00381-0>

<sup>iii</sup> The National Academies of Science, Engineering, and Medicine, *A national trauma care system: Integrating military and civilian trauma systems to achieve zero preventable deaths after injury* (2016), <https://nap.nationalacademies.org/read/23511/chapter/5#44>.

<sup>iv</sup> C.G. Velopulos, et. al., *National Cost of Trauma Care by Payer Status*, 184 *J. of Surgical Research* 444 (Sept. 2013), <https://www.sciencedirect.com/science/article/abs/pii/S0022480413005520>.

<sup>v</sup> Curtis S. Florence, et. al., *Medical Costs of Fatal and Nonfatal Falls in Older Adults*, 66 *J. Am. Geriatric Soc'y* 693 (Mar. 2018), <https://pubmed.ncbi.nlm.nih.gov/29512120/>.

<sup>vi</sup> *Id.*

<sup>vii</sup> Catherine Velopulos, et. al., *National Cost of Trauma Care by Patient Status*, 184 *Assoc. for Academic Surgery* 444 (Sept. 2013), [https://www.journalofsurgicalresearch.com/article/S0022-4804\(13\)00552-0/abstract](https://www.journalofsurgicalresearch.com/article/S0022-4804(13)00552-0/abstract).

<sup>viii</sup> Curtis S. Florence, et. al., *Medical Costs of Fatal and Nonfatal Falls in Older Adults*, 66 *J. Am. Geriatric Soc'y* 693 (Mar. 2018), <https://pubmed.ncbi.nlm.nih.gov/29512120/>.

The Trauma Center Association of America (TCAA) is dedicated to securing the economic viability of trauma centers and systems across the country. The Association's vision would result in access to optimal trauma care for all. TCAA supports and represents nearly 500 trauma centers across the country through advocacy, operations, finance, and educational opportunities. For more information, please visit [traumacenters.org](http://traumacenters.org).