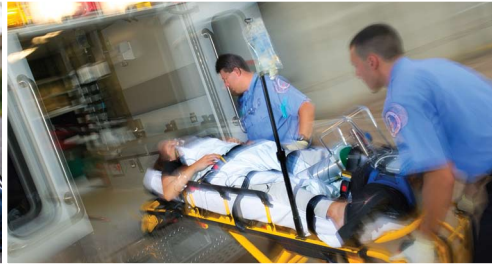


# Accurate Field Triage of Injured Patients Saves Lives and Money

Getting the right patient to the right place at the right time



## Injury and Field Triage

Injuries affect all Americans. They are the leading cause of death for children and adults from age 1 to 44 in the United States. At the scene of an injury, Emergency Medical Service (EMS) providers must identify the severity and type of injury, and determine which hospital or other facility would be the most appropriate to meet the needs of the patient. This is done through a process called “field triage.”

Not all injured patients can or should be transported to a Level I trauma center. Other hospitals can effectively meet the needs of patients with less severe injuries, and may be closer to the scene. Transporting all injured patients to Level I centers—regardless of injury severity—limits the availability of Level I trauma center for those patients who really need the level of care provided at those facilities. Proper field triage ensures that patients are transported to the most appropriate healthcare facility that best matches their level of need.

The Centers for Disease Control and Prevention (CDC) partnered with the National Highway Traffic Safety Administration and the American College of Surgeons to publish the “Guidelines for Field Triage of Injured Patients, Recommendations of the National Expert Panel on Field Triage” in 2009 in the CDC’s *Morbidity and Mortality Weekly Report (MMWR)*<sup>1</sup>, providing evidence based guidance for effective field triage.

## Defining the Impact: Why Accurate Field Triage Matters

### Accurate field triage lowers the risk of death for the severely injured

The CDC-funded National Study on the Costs and Outcomes of Trauma showed a 25% reduction in deaths for severely injured patients who received care at a Level I trauma center rather than at a nontrauma center.<sup>2</sup> Furthermore, a retrospective study of 11,398 severely injured adult patients admitted into hospitals in Ontario, Canada showed that deaths were significantly higher among patients who were initially transported or undertriaged to nontrauma centers.<sup>3</sup>

### Accurate field triage reduces over triage to trauma centers and healthcare costs

A recent study of three Level I trauma centers illustrated that using the 2006 guidelines would have resulted in a 12% reduction in patients transported to a trauma center.<sup>4</sup> Results from a current CDC study showed that implementing the 2006 guidelines could produce an estimated national savings of \$568,000,000 per annum.<sup>5</sup>

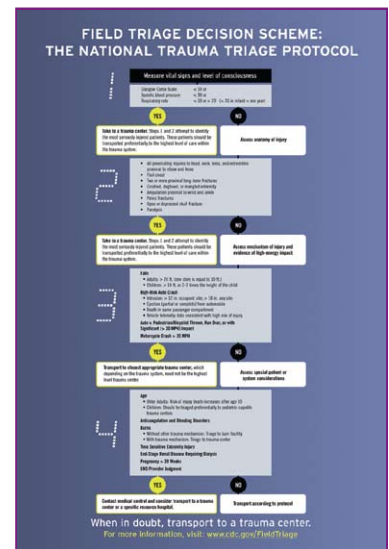
## Disseminating, Adopting, and Evaluating Guidelines for Field Triage of the Injured Patient

### Dissemination

CDC developed educational resources and training materials to support the adoption and implementation of the field triage guidelines nationally. Since 2009, CDC has:

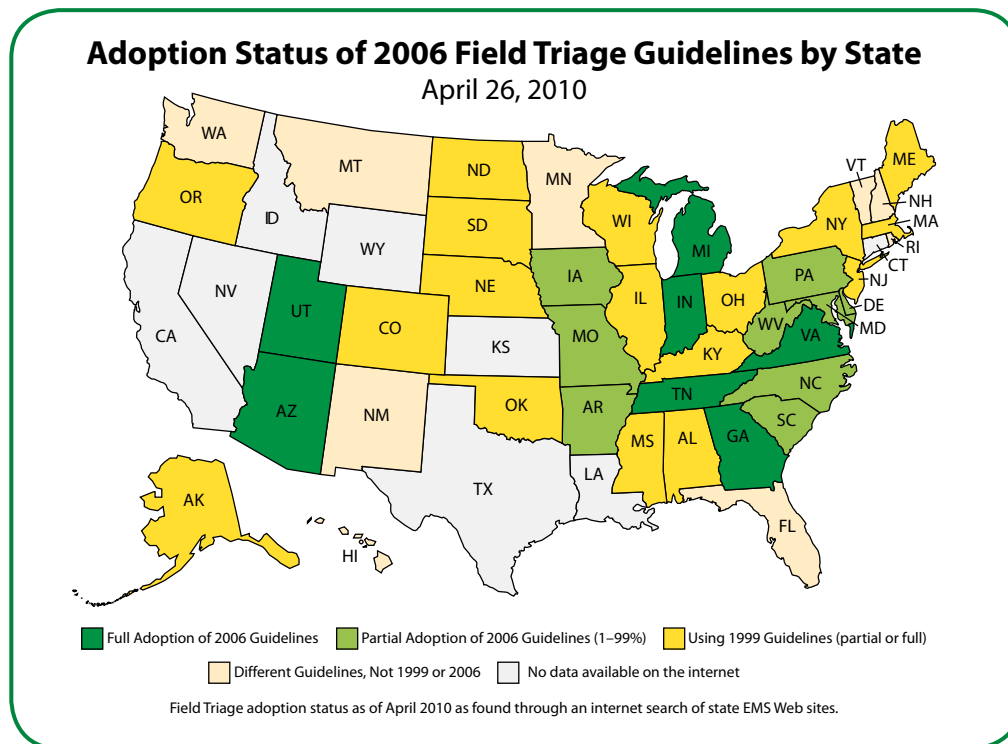
- Disseminated more than 350,000 field triage educational materials, including the *MMWR*
- Emailed approximately 150,000 copies of the field triage education materials to EMS providers
- Disseminated more than 40,000 copies of the *Training Guide for Emergency Medical Services Leaders* to local, state, and regional emergency medical leaders
- Launched a CDC field triage Web page that has received more than 74,000 page views and 11,000 downloads
- Provided free continuing education to an estimated 7,000 EMS providers, physicians, and nurses.

The *Journal of Emergency Medical Services (JEMS)* reprinted the 2009 *MMWR* and inserted a pocket card and badge depicting the Guidelines, reaching approximately 51,000 subscribers. Additionally, the guidelines have been incorporated into textbooks used by the emergency and trauma community.



## Adoption

A 2010 survey of state EMS Web sites showed that 16 states had partially or completely adopted the 2006 guidelines (as shown on map).<sup>6</sup>



In 2010, the National Association of EMS Physicians and the American College of Surgeons –Committee on Trauma issued a joint position paper recommending adopting the guidelines for local trauma and EMS systems.

In addition to endorsements from 17 organizations identified in the 2009 *MMWR*, the Federal Interagency Committee on Emergency Medical Services (FICEMS) also approve the guidelines. CDC has worked closely with states to conduct site visits, provide mini-grants, and offer technical assistance. These efforts have provided valuable insight about how the guidelines are being used at the state and local level.

## Evaluation

CDC surveyed 2,505 EMS, emergency medicine, and trauma care providers about their knowledge and use of the guidelines for field triage and use of accompanying materials. Among the participants who used the materials, the *Training Guide for Emergency Medical Services Leaders* was rated highly, with 51.8% of respondents indicating it was very useful. Sixty two percent of EMS providers and 71% of others surveyed stated that they would use the training guide. In addition, 70% of EMS providers and 65% of others found the pocket card useful. CDC has received nearly 900 comment cards that were inserted into the *Training Guide for Emergency Medical Services Leaders*. Approximately 90% of these contained positive feedback about the guidelines.

**To learn more about field triage, visit: [www.cdc.gov/Fieldtriage](http://www.cdc.gov/Fieldtriage).**

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