



NATIONAL CONFERENCE
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The Right Patient,
The Right Place,
The Right Time

A Look at Trauma and
Emergency Medical Services
Policy in the States



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Medical Services Policy in the States

By Hollie Hendrikson



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William T. Pound
Executive Director

7700 East First Place
Denver, Colorado 80203
(303) 364-7700

444 North Capitol Street, N.W., Suite 515
Washington, D.C. 20001
(202) 624-5400

www.ncsl.org

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The National Conference of State Legislatures is the bipartisan organization that serves the legislators and staffs of the states, commonwealths and territories. NCSL provides research, technical assistance and opportunities for policymakers to exchange ideas on the most pressing state issues and is an effective and respected advocate for the interests of the states in the American federal system. Its objectives are:

- To improve the quality and effectiveness of state legislatures.
- To promote policy innovation and communication among state legislatures.
- To ensure state legislatures a strong, cohesive voice in the federal system.

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Executive Summary

Whether they sustain a head injury from a motor vehicle crash, a gunshot wound from a violent crime or a broken leg from a fall, many victims of traumatic injuries depend on the trauma system, which includes the prehospital and emergency medical services (EMS) system, and an interconnected network of trauma centers, to be quickly transported to a nearby trauma center or emergency department. For patients with severe injuries, getting care at a Level I trauma center lowers the risk of death by 25 percent.

A trauma system is designed to provide a continuum of intensive medical services that begins immediately following a traumatic injury and continues through hospital discharge. EMS is an integral part of a trauma system that provides rapid response to emergencies, prehospital emergency care and transportation to an appropriate medical facility. Within trauma centers, patients are stabilized, diagnosed and provided with time-critical medical or surgical interventions. Both trauma and EMS are discussed here as two important parts of one system that responds to traumatic injuries and public health emergencies.

Trauma systems vary by state. This report examines seven key components of trauma systems in each state. These include the trauma center designation processes; the existence of trauma or EMS advisory groups; trauma registry use; current field triage guidelines; trauma system involvement in emergency preparedness planning; state funding sources; and federal funding sources. This information offers state policymakers a comprehensive picture of trauma care and EMS access throughout a state.

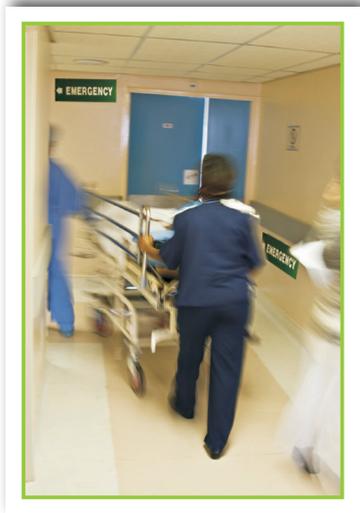
Introduction

Unintentional and violence-related injuries—such as a head injury from a motor vehicle crash, a gunshot wound from a violent crime or a broken leg from a fall—are the leading cause of death for Americans ages 1 to 44.¹ For the majority of young and middle-aged Americans, this means that car crashes, falls or another traumatic injury will more likely lead to death than cancer, heart disease, hypertension and influenza combined.

By providing rapid access to life saving medical interventions, the trauma system is an integral component of reducing injury morbidity and mortality among Americans. Quick response from EMS personnel and specialized treatment from emergency medical providers and trauma surgeons can significantly reduce the risk of death from a severe injury.

The trauma system includes a continuum of medical services that follow a traumatic injury. The first responders on the scene of a car crash, the ambulance that transports the injured to a trauma center, the specialized care provided at that center, and the post-surgery rehabilitation within a medical facility are components of a trauma system.

Each state's trauma system is unique. The development, maintenance and growth of a state's trauma system depend upon many factors, including authorizing legislation, funding, and geographic and demographic characteristics. Some state legislatures have required creation of a comprehensive statewide trauma system. In 2005, for example, the Minnesota Legislature established



a statewide trauma system, requiring the commissioner of health to adopt criteria that address “emergency medical service trauma triage and transportation guidelines, designation of hospitals as trauma hospitals, interhospital transfers, a trauma registry, and a trauma system governance structure.”²

Some states require certain components of the trauma system. In 2003, for example, the Idaho Legislature required creation of a statewide trauma registry,³ but did not require creation of a statewide system like Minnesota’s. No two state trauma systems are exactly alike.

Seven components of state trauma systems are examined in this report, including the trauma center designation processes; the existence of trauma or EMS advisory groups; trauma registry use; current field triage guidelines; trauma system involvement in emergency preparedness planning; state funding sources; and federal funding sources.

The trauma system is an integral part of the health care delivery system in the United States. This report offers state legislators a comprehensive picture of the trauma system in each state.

A survey of state trauma program managers conducted by the National Association of State EMS Officials is the source for several of these components. More detailed state-specific information is included in the appendices of this report.

Trauma Centers

Trauma care facilities are an integral aspect of traumatic injury care. Access to a Level I trauma center reduces the risk of death by 25 percent among severely injured patients.⁴ Severely injured patients who are more than one hour from a trauma center are at increased risk of death. Rapid transport of severely injured patients to the appropriate level of care can save lives. Prehospital transport to a trauma center within one hour often is referred to as the “golden hour.”⁵

Trauma centers are unevenly distributed throughout the United States. More than 46 million Americans lack timely access to a Level I or II trauma center within one hour of being injured, while almost 43 million Americans have access to 20 or more trauma centers within an hour.⁶

Trauma centers vary in their capacity to treat severely injured patients. To ensure that trauma care facilities are equipped to serve patients with appropriate levels of care, trauma center levels are established through a state-based designation process. Thirty-six states give a state agency, such as the de-

Trauma Center Designation vs. Verification

Designation is the process by which hospitals in the trauma system are classified by the level of care they can provide. Trauma center designation is granted by government agencies or other authorized entities within states. The designation process varies from state to state, but typically a facility must meet a list of state-identified requirements and undergo site visits by external reviewers.

Verification is the process by which the American College of Surgeons evaluates a trauma facility to ensure it meets the standard level of care required by the designated level in the trauma system. If a trauma facility meets the requirements listed in Resources for Optimal Care of the Injured Patient, the facility is verified by the ACS as a trauma center. This process is voluntary.



partment of health, the legal authority to designate trauma centers. In five states, trauma centers are designated through administrative or regulatory code. In another five states, trauma centers are designated or verified in unique ways, such as requiring centers to use the American College of Surgeons (ACS) Committee on Trauma's verification process (as in Kentucky and Ohio). Four states do not regulate the trauma center designation or verification process. The ACS Committee on Trauma plays an important role in trauma center development by establishing criteria for levels of care at trauma centers and verifying a center's adherence to these criteria. The process of trauma center designation and verification varies among states.

- Forty-four states require trauma center designation criteria to be based (at least in part) on the American College of Surgeon standards.
- Thirty-eight states require trauma centers to be visited by an authorized state agency or other group to achieve trauma center status.
- Sixteen states require trauma centers to pay a fee to apply for trauma center designation status.

Trauma Center Levels as Defined by the American College of Surgeons Committee on Trauma

Level I: As the highest level of trauma center, Level I facilities are capable of providing total care for every aspect of injury— from prevention through rehabilitation. These centers offer 24-hour, in-house coverage by general surgeons; and prompt availability of care in specialties such as orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology, internal medicine and critical care, including other specialties. Level I centers also provide leadership in innovative research programs, trauma education and training, quality assessment and injury prevention.

Level II: Level II trauma centers can provide definitive care for all injured patients. Key elements of a Level II trauma center include 24-hour immediate coverage by general surgeons, as well as coverage by the specialties of orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology and critical care.

Level III: Level III trauma centers have demonstrated an ability to provide prompt assessment, resuscitation, stabilization of injured patients and emergency operations. Key elements of a Level III trauma center include 24-hour immediate coverage by emergency medicine physicians and prompt availability of general surgeons and anesthesiologists. Level III trauma centers have developed transfer agreements for patients who require more comprehensive care at a Level I or Level II trauma center.

Level IV: A Level IV trauma center is capable of providing 24-hour physician coverage, resuscitation, and stabilization to injured patients before transfer to a facility that provides a higher level of trauma care.

Advisory Groups

Coordinating Trauma and EMS Care in Louisiana

The Louisiana Emergency Response Network (LERN) was created by the Legislature in 2004 as the state agency responsible for developing and maintaining a statewide system of care coordination for patients with serious traumatic injury or time-sensitive illness. LERN's statewide volunteer governing board and nine regional commissions help guide trauma and EMS care throughout Louisiana. The network's goal is to build a comprehensive system to address the state's day-to-day trauma and EMS needs and larger-scale emergencies and natural disasters.⁷ Data collected from the trauma registry will be used to identify and implement system improvements in the future.

To help guide trauma and emergency medical service activities, some legislatures have required creation of a statewide advisory committee, council or stakeholder group. These advisory groups often are tasked with advising state agencies, the legislature or the governor about recommended changes for the state's trauma system. Often, advisory groups use data collected through the state's trauma registry to identify opportunities to improve the system. In

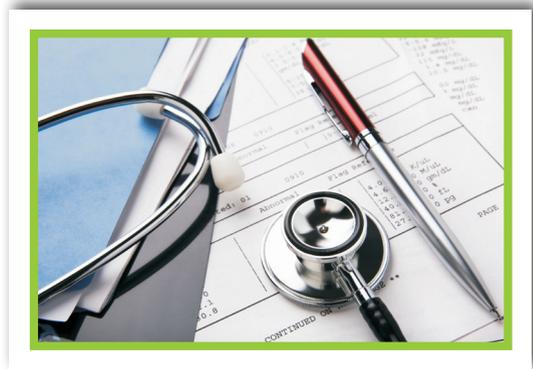
25 states, trauma advisory groups are created in statute, and 25 states also have statutes that require creation of emergency medical services advisory groups. Six of these states have both trauma and EMS advisory groups. Colorado, Louisiana and Washington have combined or joint trauma and EMS advisory groups.

These groups also may be required to include members from the trauma and EMS community, such as a board-certified trauma physician and emergency medical physician, a prehospital service provider such as a paramedic, or a representative from the state agency that manages the trauma system.

Statewide Trauma Registry

Statutes in 40 states establish a statewide trauma registry. In most states, the registry collects data about the incidence, severity, causes, costs and results of trauma. Like disease registries, trauma registries are used to collect information about demographic characteristics, treatments and clinical results to monitor and evaluate the many aspects of the trauma system. These data can be used to help improve patient care in the future. Each state's registry differs in the type and scope of information collected. Not all states with trauma registries require all trauma facilities or prehospital service providers to submit data to the registry.

- Twenty-four states require only trauma centers to submit data to the trauma registry.
- Thirteen states require all acute care facilities to submit data to the trauma registry.
- Nineteen states require the trauma registry to be integrated with prehospital data reporting.



Field Triage Guidelines

Prehospital emergency care and transport are integral components of getting a patient to the appropriate level of care needed. The Guidelines for Field Triage of Injured Patients, developed by an expert panel convened by the Centers for Disease Control and Prevention (CDC), the American College of Surgeons and the National Highway Traffic Safety Administration, are criteria for EMS providers to identify patients who need specialized trauma center care. These guidelines help EMS personnel accurately estimate injury severity to ensure that patients with the most severe injury are transported to the appropriate level of trauma care. Transporting all traumatic injuries to a Level I trauma center is unnecessary, and uses valuable financial and health care resources at a higher cost. Patients with less severe injuries are transported to the most appropriate facility for their injury.

A 2011 study found that adoption of the CDC's 2006 field triage guidelines can decrease by at least 12 percent the number of patients who are incorrectly triaged.⁸ Forty-two states have adopted these guidelines to improve trauma triage accuracy. Twenty-nine of these states have modified the official guidelines to meet a unique geographic or population need within the state.



Emergency Preparedness



Preparing for and responding to public health emergencies require a coordinated effort between many local, state and national emergency service responders. The trauma system is an integral part of any public health emergency or natural disaster, and a well-functioning day-to-day trauma system

can be the foundation for a well-functioning emergency medical response following a disaster or mass casualty. Some states coordinate emergency medical preparedness resources, communication and planning to effectively and efficiently respond to emergencies. In many states, the trauma, EMS and emergency preparedness programs are housed in separate agencies, operate on separate state and federal funding streams, and rarely communicate. These disconnects can hinder emergency medical response in a large-scale emergency. Developing statewide emergency management plans, such as a disaster response or mass casualty event plan, is a strategy states can use to identify each agency's role and responsibilities during public health emergencies. The process of developing these plans varies from state to state. In some states, the legislature has initiated coordination of emergency preparedness activities.

- Twenty-four states have identified a specific role for the trauma system in the state's disaster response plan.
- Nineteen states have identified a specific role for the trauma system in the state's mass casualty incident plan.

Emergency Management in Florida

In 1989, the Florida Legislature established the State Emergency Management Act, which created the Division of Emergency Management as a separate entity. This division is responsible for preparing a state comprehensive emergency management plan “to ensure that the state is prepared for emergencies and minor, major, and catastrophic disasters.”⁹

The plan also defines the responsibilities of the government, private, volunteer and non-governmental organizations during emergencies to maximize coordination among these entities.¹⁰

State Funding Sources

A state's trauma system is supported by a combination of state, local, federal and private funding sources; some are more stable, and others vary year-to-year. State-based support often consists of funding from several sources to support trauma and EMS services. Oklahoma, for example, created the Trauma Care Assistance Revolving Fund,¹¹ which is supported by a combination of driver's license fees, criminal fines, moving violation fees and the state tobacco tax. In contrast, Arkansas¹² supports the EMS Enhancement Revolving Fund through fees paid to the Department of Health for EMS licenses.

Each state provides financial support for the trauma system in a unique way. Thirty states fund the trauma system and the EMS system separately, while 10 provide joint funding for both trauma and EMS. In states that fund trauma and EMS separately, the amount of support for the two groups is rarely equal. Figure 1 shows state funding sources for trauma, and Figure 2 shows funding sources for EMS.

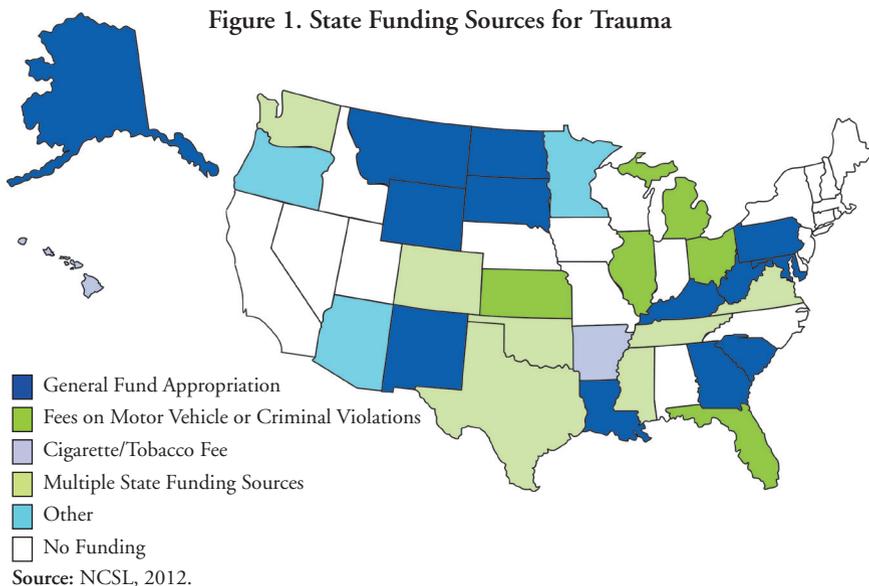
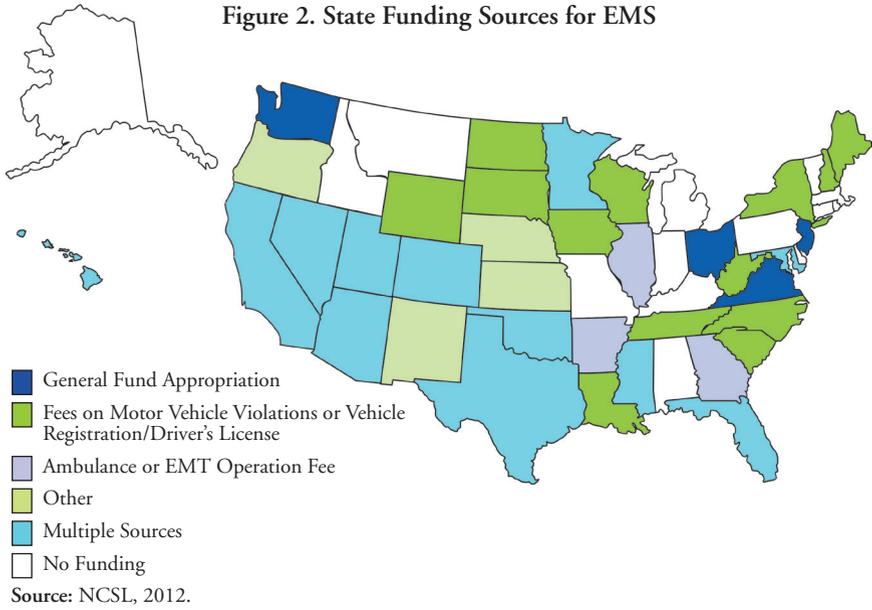


Figure 2. State Funding Sources for EMS



Federal Funding Sources

In addition to state funds, many states use federal grant funds to support state trauma systems. Without a dedicated federal trauma or EMS program, states use a variety of federal grant funds to help bolster trauma system activities. Forty-three states report some type of federal funding to support current activities. Most federal funding sources require state agencies to apply or reapply frequently for grant funding; grant periods can be as short as one year. A list of the most common federal funds used to support the trauma systems follows.

- The *Office of Rural Health Policy* in the U.S. Health Resources and Services Administration of the Department of Health and Human Services provides grants to states to help increase rural access to health care. These grants often fund rural hospitals, health centers and local clinics. Nineteen state Offices of Rural Health receive these grants to help fund the trauma system within their states.
- *Section 402 Highway Safety Grant Program* is available to states for multiple safety initiatives, including data analyses, safety education programs and safety campaigns. Five states tap Section 402 funds to support their state trauma system.
- *Section 408 Traffic Safety Information System Improvement Grants* are awarded to states to improve the timeliness, accuracy, completeness and uniformity of traffic safety data. Thirteen states have used these funds to support the trauma system. It is common for states to use these funds to develop a statewide trauma registry.
- The *Preventative Health and Human Services Block Grant* provides funding to help states address public health needs with innovative and unique

methods. Of the \$80 billion budgeted for this grant, \$4.7 million was used by states to support EMS. Six states have reported using the PHHS funds to support the trauma system. Ohio used the money to help train EMS providers to quickly identify stroke symptoms, use specific stroke treatment guidelines and transport patients to the closest stroke center.

- The *Department of Homeland Security* distributes billions dollars in grants to states to help bolster disaster preparedness and protect vital infrastructure. Five states use Department of Homeland Security grant funds to support the trauma system.
- In the wake of Hurricane Katrina, the Office of the *Assistant Secretary for Preparedness and Response* was created to help states prevent, prepare for and respond to public health emergencies and disasters. This office offers support to help develop state and local disaster preparedness capacity. Eleven states use some portion of ASPR funds to support the trauma system. For example, Alabama uses this funding to support pediatric emergency medical services by providing supplies, training and education to prehospital providers that frequently serve children.
- The federal *Emergency Medical Services for Children* program provides support to states to ensure that children and adolescents receive appropriate emergency medical care and to integrate pediatric emergency care into the system. Fifteen states use a portion of EMSC funds to help support the trauma system.

Conclusion

Substantial variation among trauma systems exists across states. In the absence of any organized national trauma system, state and local governments are responsible for establishing comprehensive injury response systems. Legislators play an important role in developing a state's trauma system. Many aspects of a trauma system are set in statute, and data collected through trauma registries often are used to inform policymakers on ways to improve health, save costs and inform injury prevention efforts. States are the laboratories for innovative policies. Identifying unique and effective characteristics of one state's trauma system can provide options for other policymakers who are seeking new ways to help meet the needs of the trauma system in their state. Legislators can be leaders in the trauma care networks that serve their districts and bring useful expertise for future operations.

Appendix 1. State-Specific Information

Trauma Centers		
Who has the legal authority to designate or verify trauma centers?	Authority explicitly given to state agency or board through statute.	Ala., Alaska, Ariz., Ark., Colo., Conn., Del., Fla., Ill., Ind., Kan., La., Md., Mass., Minn., Mo., Mont., Neb., Nev., N.H., N.M., N.Y., N.C., N.D., Okla., Ore., S.C., S.D., Tenn., Texas, Utah, Va., Wash., W.Va., Wis., Wyo.
	Identified through administrative/regulatory code.	Ga., Iowa, Mich., Miss., N.J.
	Not identified in statute or regulation.	Hawaii, Idaho, R.I., Vt.
	Other.	Calif., Ky., Maine, Ohio, Pa.
Trauma center designation criteria based on ACS standards (at least in part) *		Ala., Alaska, Ariz., Ark., Calif., Colo., Conn., Del., Fla., Ga., Hawaii, Ill., Ind., Iowa, Kan., La., Md., Mass., Mich., Minn., Mo., Mont., Neb., Nev., N.H., N.J., N.M., N.Y., N.C., N.D., Ohio, Okla., Ore., Pa., R.I., S.C., Tenn., Texas, Utah, Va., Wash., W.Va., Wis., Wyo.
State charges fee for trauma center designation. *		Ark., Calif., Colo., Iowa, Kan., Md., Neb., Nev., N.M., Pa., Tenn., Texas, Utah, Va., Wash., W.Va.
Site visit is required for designation. *		Ala., Alaska, Ariz., Ark., Calif., Colo., Del., Fla., Ga., Hawaii, Ill., Iowa, Kan., La., Md., Minn., Miss., Mo., Mont., Neb., Nev., N.H., N.J., N.M., N.Y., N.C., N.D., Okla., Ore., Pa., S.C., S.D., Tenn., Utah, Va., Wash., W.Va., Wis., Wyo.

Advisory Groups		
A statewide trauma advisory committee or stakeholder group established by statute.		Ala., Ariz., Ark., Colo., Conn., Fla., Ga., Iowa, Kan., Ky., La., Maine, Mich., Minn., Mont., N.H., N.Y., Ohio, Okla., Pa., R.I., S.C., Utah, Wash., Wis.
A statewide EMS advisory committee or stakeholder group established by statute.		Alaska, Ariz., Ark., Calif., Colo., Del., Hawaii, Ill., Iowa, La., Md., Mich., Miss., Mo., Nev., N.J., N.M., N.Y., N.C., S.C., Tenn., Texas, Utah, Wash., W.Va.
Statewide Trauma Registries		
Statewide trauma registry established by statute.		Ala., Alaska, Ariz., Ark., Colo., Conn., Del., Fla., Hawaii, Idaho, Ill., Ind., Kan., Ky., La., Maine, Md., Mass., Minn., Miss., Mo., Mont., Neb., Nev., N.M., N.C., N.D., Ohio, Okla., Ore., Pa., S.C., S.D., Tenn., Texas, Utah, Va., Wash., Wis., Wyo.
Data must be submitted to: *	Trauma center only.	Ala., Alaska, Ariz., Ark., Colo., Del., Hawaii, Ill., Iowa, Ky., Md., Minn., Miss., Mo., Neb., N.M., N.Y., N.C., Ore., Pa., S.C., Tenn., Wash., W.Va.
	All acute care.	Conn., Fla., Kan., Mass., Mont., Nev., N.D., Ohio, Okla., Texas, Utah, Va., Wyo.
The trauma registry must be integrated with prehospital data (includes registries that are not statewide). *		Ala., Alaska, Ark., Del., Hawaii, Ill., Kan., La., Md., Mass., Miss., Mo., Neb., N.C., Ohio, Okla., Pa., Texas, Wyo.

Field Triage Guidelines		
The state adopted guidelines for field triage of injured patients: recommendations of the National Expert Panel on Field Triage.*	Yes.	Ark., Conn., Hawaii, La., Mass., Mich., Nev., N.J., N.M., N.D., Tenn., Texas, Wyo.
	With modifications.	Ala., Ariz., Calif., Colo., Del., Fla., Ga., Ill., Iowa, Kan., Ky., Maine, Md., Miss., Mont., N.H., N.Y., N.C., Ohio, Okla., Ore., Pa., S.C., S.D., Utah, Va., Wash., W.Va., Wis.
	No/other,	Alaska, Idaho, Ind., Minn., Mo., Neb., R.I., Vt.
Emergency Preparedness		
The state trauma or EMS program has a leadership role in the state's:*	Disaster response plan.	Ala., Conn., Fla., Ill., Iowa, La., Maine, Md., Mass., Mich., Mo., Mont., N.J., N.C., Okla., Ore., Pa., S.C., S.D., Tenn., Utah, Wash., Wis., Wyo.
	Mass casualty incident plan.	Conn., Fla., Iowa, La., Maine, Md., Mass., Mich., Miss., N.J., N.C., Okla., Ore., Pa., R.I., Utah, Va., Wis., Wyo.

Appendix 2. State-Specific Funding Information

State Funding		
The state provides formal funding mechanisms for the trauma system through:	Fees on moving/motor vehicle violations.	Colo., Fla., Ill., Kan., Miss., Ohio, Okla., Texas, Wash.
	Fees on criminal penalties.	Fla., Ill., Mich., Va.
	Vehicle registration/driver's license fees.	Miss., Okla., Texas, Va., Wash.
	Cigarette/tobacco fee.	Ark., Hawaii, Okla., Tenn., Texas
	General fund appropriation.	Alaska, Ga., Ky., La., Md., Mont., N.M., N.D., Pa., S.C., S.D., Tenn., Texas, W.Va., Wyo.
	Ambulance or EMT operations fee.	Texas
	Other.	Ariz., Colo., Minn., Ore., Texas
The state provides formal funding mechanisms for the EMS system through:	Fees on moving/motor vehicle violations.	Calif., Colo., Fla., Minn., Miss., N.J., Ohio, Okla., Texas, Wash.
	Fees on criminal penalties.	Ariz., Fla., Hawaii, Nev., Okla., Utah
	Vehicle registration/driver's license fees.	Hawaii, Md., Miss., N.C., Texas, Wash.
	Cigarette/tobacco fee.	Ariz., Hawaii, Okla., Texas
	General fund appropriation.	Calif., Iowa, La., Md., Minn., Nev., N.H., N.Y., N.D., S.C., S.D., Tenn., Texas, Utah, Va., W.Va., Wis., Wyo.
	Ambulance or EMT operations fee.	Ariz., Colo., Ga., Ill., Md., Nev., Texas
	Other.	Ariz., Kan., Neb., N.M., Ore., Texas

Federal Funding		
Federal grants used to support the trauma system?*	Office of Rural Health Policy	Del., Fla., Ind., Kan., Ky., Maine, Minn., Mont., N.H., N.Y., N.D., Ore., Pa., S.D., Texas, Utah, Wash., W.Va., Wyo.
	Section 402 Highway Safety Grant Program	Ala., Md., Nev., Utah, Wash.
	Section 408 Traffic Safety Information System Improvement Grants	Calif., Fla., Idaho, Ind., Ky., Md., N.D., Tenn., Utah, Wash., Wyo.
	Preventative Health and Human Services Block Grant	Iowa, Mo., N.M., Texas, Wash., W.Va.
	Department of Homeland Security	Ala., Maine, Mass., N.C., Texas
	Assistant Secretary for Preparedness and Response	Ala., Fla., Ill., Mass., Mich., Minn., Mont., N.C., Pa., Utah, Wis.
	Emergency Medical Services for Children	Ala., Fla., Ky., Md., Mass., Mo., Mont., Neb., N.Y., N.C., Pa., Texas, Utah, Wash., W.Va.
	Other	Wash., Wis.

*Data from a 2010 self-reported survey of state trauma program managers conducted by the National Association of State Emergency Medical Services Officials.

Notes

1. National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System (WISQARS); <http://www.cdc.gov/injury/wisqars/>.
2. Minn. Stat. §144.603 (2012).
3. Idaho Code §57-2003 (2012).
4. Ellen J. MacKenzie et al., “A National Evaluation of the Effect of Trauma-Center Care on Mortality,” *New England Journal of Medicine* 354, no. 4 (Jan. 26, 2006): 366-378.
5. R.A. Cowley, “A Total Emergency Medical System for the State of Maryland,” *Maryland State Medical Journal* 24 (1975): 37-45.
6. Charles C. Branas, et al., “Access to Trauma Centers in the United States,” *Journal of the American Medical Association* 293, no. 21 (June 1, 2005): 2626-2633.
7. Please see <http://lern.la.gov> for more information.
8. E. Brooke Lerner et al. “Comparison of the 1999 and 2006 Trauma Triage Guidelines: Where Do Patients Go?” *Emergency Care* 15 (2011): 12-17.
9. Fla. Stat. §252.35 (2012).
10. For an updated version of Florida’s state plan, see http://floridadisaster.org/documents/CEMP/2012/FINAL%20DRAFT_2012%20Basic%20CEMP%20&c%20Annexes.pdf.
11. Okla. Stat. tit. 63 §1-2530.0 (2012).
12. Ark. Stat. Ann. §19-5-1078 (2012).

NCSL and Other Resources

- American College of Surgeons Committee on Trauma
www.facs.org/
- National Conference of State Legislatures, Trauma and EMS webpage
www.ncsl.org/tabid-25206
- National Association of State EMS Officials
www.nasemso.org
- National Center for Injury Prevention and Control
www.cdc.gov/injury/
- Office of EMS at the National Traffic Highway Safety Administration
www.ems.gov/
- WISQARS Interactive Injury Statistics Database
www.cdc.gov/injury/wisqars/index.html

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