Tennessee

	RANK	GRADE
ACCESS TO EMERGENCY CARE	21	C
QUALITY & PATIENT SAFETY ENVIRONMENT	13	B+
MEDICAL LIABILITY ENVIRONMENT	25	C-
PUBLIC HEALTH & INJURY PREVENTION	38	D-
DISASTER PREPAREDNESS	51	F
OVERALL	33	C-

Tennessee outperforms most states for *Access to Emergency Care* and the *Quality and Patient Safety Environment*, but ranks last in the nation for *Disaster Preparedness*.

Strengths. Tennessee's best performance is in the *Quality and Patient Safety Environment*. The state has or is working on a stroke system of care, as well as a PCI network or STEMI system of care, and provides funding for a state EMS medical director position. The state also requires adverse event and hospital-based infections reporting. While the state data report 5.2 emergency medicine residents per 1 million people, these data were collected prior to the approval of a new emergency medicine residency program at the University of Tennessee Health Science Center.

While the state receives a mediocre grade for *Access to Emergency Care*, Tennessee has a relatively low rate of uninsured children (6.4 percent). In addition, Tennessee has the highest rate of accredited chest pain centers (4.5 per 1 million people) and ranks 11th for its high rate of staffed inpatient beds (414.0 per 100,000).

Challenges. Tennessee receives a relatively low level of federal funding for *Disaster Preparedness* which may have contributed to the state's failing performance in this category. The state does not track disaster preparedness funds used specifically for health care-related preparedness. While the state has an all-hazards medical response plan or ESF-8 plan, that plan is not shared with all professional and volunteer EMS and essential hospital personnel. Tennessee also lacks written plans for special needs patients and to supply medications for chronic conditions or dialysis to patients during a disaster. In addition, Tennessee does not have the ability to verify credentials of volunteer health professionals and to assign them to one of four levels in a state-based Emergency System for Advance Registration of Volunteer Health Professionals program.

Public health and injury prevention indicators pose serious challenges for Tennessee.

Access to Emergency Care suffers from low Medicaid reimbursement rates for office visits (62.0 percent of the national average) and a lack of emergency physicians and mental health care providers. Tennessee has only 8.9 emergency physicians per 100,000 people and needs an additional 60.2 full-time equivalent mental health care providers to serve the state's population. These issues may contribute to hospital crowding and patient transfers, problems that have been identified as priorities among emergency physicians in the state.

Public Health and Injury Prevention indicators pose serious challenges for Tennessee. The state has among the highest rates of infant mortality in the nation (8.9 deaths per 1,000 births), as well as high percentages of obese adults (28.8 percent) and adults who smoke (22.6 percent). The state also has relatively high fatal injury rates: 22.7 homicides and suicides per 100,000 people and 2.2 deaths due to unintentional fire- and burn-related injuries per 100,000.

The *Medical Liability Environment* in Tennessee suffers from the lack of a medical liability cap on non-economic damages, periodic payments of malpractice awards, and additional liability protections for EMTALA-mandated emergency care. The state also could build upon existing expert witness rules by providing for expert witnesses to be licensed in the state.

Recommendations. Tennessee should take steps to enhance its preparedness for disasters by ensuring that all disaster plans are shared with appropriate personnel and implement a "just-in-time" training system to complement the real-time notification system that is already in place. The state also could benefit from developing state or regional strike teams or medical assistance teams, as well as a statewide victim tracking system.

The state faces significant challenges in public health, especially related to health risk factors among the population. Health promotion activities (focused on areas such as obesity, smoking, and injury prevention) might significantly improve the health of the population.

Tennessee might improve access to care and its liability climate by providing additional liability protections for EMTALA-mandated emergency care, which could help encourage more specialists to provide on-call services to emergency patients. In addition, increasing Medicaid reimbursement rates might help attract and keep physicians in Tennessee, as well as provide increased access to care for the state's Medicaid population.

ACCESS TO EMERGENCY CARE — C

Indicator	Trend	Value
Board-certified emergency physicians per 100,000 pop.	Improved	5.7
Emergency physicians per 100,000 pop.		8.9
Neurosurgeons per 100,000 pop.		2.2
Orthopedists and hand surgeon specialists per 100,000 pop.		9.5
Plastic surgeons per 100,000 pop.		2.3
ENT specialists per 100,000 pop.		3.6
Registered nurses per 100,000 pop.	Worsened	904.7
Additional primary care FTEs needed		121.5
Additional mental health FTEs needed		60.2
Level I or II trauma centers per 1M pop.		1.1
% of population within 60 minutes of Level I or II trauma center		85.4
Accredited chest pain centers per 1M pop.		4.5
% of population with an unmet need for substance abuse treatment		7.7
Pediatric specialty centers per 1M pop.		3.0
Physicians accepting Medicare per 100 beneficiaries		2.8
Medicaid fee levels for office visits as a % of the national average		62.0
% change in Medicaid fees for office visits (2004-05 to 2007)		NR
% of adults with no health insurance		16.1
% of children with no health insurance		6.4
% of adults with Medicaid		8.0
Emergency departments per 1M pop.	Worsened	13.8
Hospital closures in 2006		0
Staffed inpatient beds per 100,000 pop.		414.0
Hospital occupancy rate per 100 staffed beds		66.6
Psychiatric care beds per 100,000 pop.		33.9
State collects data on diversion		No

MEDICAL LIABILITY ENVIRONMENT — C-

Indicator	Trend	Value
Lawyers per 10,000 pop.		10.9
Lawyers per physician		0.4
Lawyers per emergency physician		12.1
ATRA judicial hellholes (range 0 to -7)		0
Malpractice award payments/100,000 pop.		1.1
Average malpractice award payments		$258,594
Databank reports per 1,000 physicians		15.6
Patient compensation fund	●	No
Health court pilot project grant		No
Number of insurers writing medical liability policies per 1,000 physicians		4.4
Average medical liability insurance premium for primary care physicians		$9,868
Average medical liability insurance premiums for specialists		$47,072
Pretrial screening panels	●	No
Are pretrial screening panels' findings admissible as evidence?		N/A
Periodic payments		No
Medical liability cap on non-economic damages	●	No
Additional liability protection for EMTALA-mandated emergency care	●	No
Joint and several liability abolished	●	Yes
State provides for case certification		Yes
Expert witness required to be of the same specialty as the defendant		Yes
Expert witness must be licensed to practice medicine in the state		No

QUALITY & PATIENT SAFETY ENVIRONMENT — B+

Indicator	Trend	Value
Funding for quality improvement within the EMS system		Yes
Funded state EMS medical director		Yes
Emergency medicine residents per 1M pop.	Improved	5.2
Adverse event reporting required		Yes
Hospital-based infections reporting required		Yes
Mandatory quality reporting requirement		Yes
% of counties with E-911 capability		100.0
Uniform system for providing pre-arrival instructions		No
State has or is working on a stroke system of care		Yes
State has or is working on a PCI network or a STEMI system of care		Yes
Statewide trauma registry		Yes
% of hospitals with computerized practitioner order entry		24.3
% of hospitals with electronic medical records		47.1
% of patients with acute myocardial infarction given PCI within 90 minutes of arrival		52
Number of Joint Commission reviewed sentinel events per 1M pop. (1995–2006)		21

PUBLIC HEALTH & INJURY PREVENTION — D-

Indicator	Trend	Value
Traffic fatalities per 100,000 pop.		21.3
% of traffic fatalities alcohol related	Worsened	40.0
Front occupant restraint use (%)		80.2
Helmet use required for all motorcycle riders	●	Yes
Child safety seat/seat belt legislation (10 points possible)		8
% of children immunized, aged 19–35 months	Improved	81.4
% of adults aged 65+ who received flu vaccine in the last 12 months	Worsened	70.4
% of adults aged 65+ who ever received pneumococcal vaccine	Improved	66.5
Fatal occupational injuries per 1M workers		54.0
Homicides and suicides (non-motor vehicle) per 100,000 pop.		22.7
Unintentional fall-related fatal injuries per 100,000 pop.		5.9
Unintentional fire/burn-related fatal injuries per 100,000 pop.		2.2
Unintentional firearm-related fatal injuries per 100,000 pop.		0.7
Gun-purchasing legislation (8 points possible)		1
% of tobacco settlement funds spent on health-related services and programs		0.0
Total injury prevention funds per 1,000 pop.		$261.31
Unintentional injury prevention funds per 1,000 pop.		$216.10
Intentional injury prevention funds per 1,000 pop.		$127.99
Fall injury prevention funds per 1,000 pop.		$0.00
Infant mortality rate per 1,000 live births		8.9
% of adults with BMI > 30		28.8
Current smokers, % of adults		22.6
Binge alcohol drinkers, % of adults		8.6

DISASTER PREPAREDNESS — F

Indicator	Value
Per capita federal disaster preparedness funds	$7.30
Disaster preparedness funds used specifically for health care-related preparedness are tracked	No
All-hazards medical response plan or ESF-8 plan?	Yes
Plan shared with all EMS and essential hospital personnel?	No
Public health and emergency physician input into the state planning process	Yes, Yes
Public health and emergency physician input into the daily operations of the SEOC	Yes, No
Written plan for the coordination of the SEOC or local EMAs to provide security to hospitals in case of emergency events	Yes
Number of drills and exercises conducted involving hospital personnel, equipment, or facilities	35
Accredited by the Emergency Management Accreditation Program	Yes
Written plan specifically for special needs patients	No
Written plan to supply medications for chronic conditions	No
Written plan to supply dialysis for patients	No
Real-time notification system in place to notify identified health care providers of an event	Yes
"Just-in-time" training systems in place	No
Statewide medical communication system with one layer of redundancy	Yes
Statewide patient tracking system	Yes
Statewide victim tracking system	No
Statewide real-time or near real-time syndromic surveillance system	Yes
Real-time surveillance system in place for common ED presentations	Yes
Bed surge capacity per 1M pop.	NR
Burn unit beds per 1M pop.	5.8
ICU beds per 1M pop.	305.2
Verified burn centers per 1M pop.	0.0
State able to verify credentials and assign volunteer health professionals to four ESAR-VHP levels	No
Nurses registered in ESAR-VHP per 1M pop.	NR
Physicians registered in ESAR-VHP per 1M pop.	NR
Training required in disaster management and response to bio- and chem terrorism for essential hospital personnel, EMS personnel	Yes, Yes
State or regional strike teams or medical assistance teams	No
Additional liability protections for health care workers during a disaster	Yes, civil
% of RNs that received any emergency training	48.1
State requires EMS and essential ED personnel to be NIMS compliant	Yes

Improved since 2006
Worsened since 2006
● No change since 2006
NR Not reported
N/A Not applicable
See *Summary Statistics for State Comparisons*