

Missouri

While Missouri can boast of substantial achievements in its disaster planning efforts, significant progress is needed to improve traffic safety and reduce other accident-related fatalities.

Strengths. Missouri’s grade in *Disaster Preparedness* is due to a wide range of planning and coordination activities at the state level. Missouri has an all-hazards medical response plan, as well as a written plan specifically for patients with special needs. The state has real-time notification and syndromic surveillance systems, “just-in-time” training, a statewide medical communication system with one layer of redundancy, and liability protections for health care workers in the event of a disaster. Missouri also ranks among the top five states for per capita burn unit beds and ICU beds. The state has the third highest rate of nurses registered in the state-based Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) program, though the state lacks any physicians registered with ESAR-VHP.

While Missouri did not score exceptionally well with regard to *Access to Emergency Care*, the state’s relatively high capacity for care is worthy of mention. The state ranks second in the nation for the high rate of psychiatric care beds and sixth for accredited chest pain centers. Missouri has higher-than-average rates of staffed inpatient beds, as well as a relatively low daily hospital occupancy rate. The state also has high rates of neurosurgeons, plastic surgeons, and registered nurses per capita, compared to the nation as a whole.

Challenges. Missouri’s poorest showing is in the area of *Public Health and Injury Prevention*, where the state is ranked 42nd in the nation. Missouri ranks 37th for traffic fatalities, 40th for seat belt use, and 41st for the percentage of traffic fatalities that are alcohol-related. The state also ranked

poorly for its relatively high rates of fatal unintentional injuries due to fires or burns (40th), falls (38th), and firearms (37th). Similarly, the rates of homicides and suicides and fatal occupational injuries were also relatively high. Missouri’s infant mortality rate is 7.5 deaths per 1,000 live births, compared to a rate of 6.9 per 1,000 live births nationally. The obesity rate is also higher than the nation as a whole (27.2 versus 25.1 percent, respectively), as is the proportion of adults who smoke cigarettes (23.2 versus 20.1 percent).

The *Quality and Patient Safety Environment* in Missouri shows a mixed picture. While the state does have a funded EMS medical director position, there is no funding for quality improvement within the EMS system. Similarly, while a stroke system of care and a PCI network or STEMI system of care are being implemented, Missouri lacks a uniform system for providing pre-arrival instructions. Hospital-based infections reporting is required by the state, but there is no mandatory quality reporting requirement.

Although Missouri has considered multiple medical liability reforms, not all have been enacted. Missouri has partially abolished joint and several liability, provides for case certification by an expert




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witness, and allows for periodic payments of malpractice awards at the request or agreement of one or both parties to the suit. However, the state does not have additional liability protections for EMTALA-mandated emergency care, requirements regarding the specialty or licensing of expert witnesses, or pretrial screening panels.

	RANK	GRADE
ACCESS TO EMERGENCY CARE	18	C
QUALITY & PATIENT SAFETY ENVIRONMENT	27	C
MEDICAL LIABILITY ENVIRONMENT	22	C
PUBLIC HEALTH & INJURY PREVENTION	42	D-
DISASTER PREPAREDNESS	18	B
OVERALL	23	C

Recommendations. Regarding the state’s grade in *Public Health and Injury Prevention*, Missouri could see significant improvements through greater investment in injury prevention and health promotion activities to encourage positive lifestyle changes, such as smoking cessation and prevention, healthy eating, physical activity, and increased seat belt use. There is also a need to create further quality improvement and monitoring systems, enact additional liability reforms, and increase the number of physicians registered in ESAR-VHP. In addition, the state would benefit from strategies to increase the recruitment and retention of medical specialists and specialty service providers, particularly in the areas of mental health and substance abuse.


ACCESS TO EMERGENCY CARE **C**

Board-certified emergency physicians per 100,000 pop.	 7.1
Emergency physicians per 100,000 pop.	11.1
Neurosurgeons per 100,000 pop.	2.2
Orthopedists and hand surgeon specialists per 100,000 pop.	9.3
Plastic surgeons per 100,000 pop.	2.3
ENT specialists per 100,000 pop.	3.5
Registered nurses per 100,000 pop.	 964.3
Additional primary care FTEs needed	212.2
Additional mental health FTEs needed	45.0
Level I or II trauma centers per 1M pop.	3.1
% of population within 60 minutes of Level I or II trauma center	83.8
Accredited chest pain centers per 1M pop.	2.7
% of population with an unmet need for substance abuse treatment	9.2
Pediatric specialty centers per 1M pop.	3.1
Physicians accepting Medicare per 100 beneficiaries	2.9
Medicaid fee levels for office visits as a % of the national average	82.5
% change in Medicaid fees for office visits (2004-05 to 2007)	17.7
% of adults with no health insurance	14.6
% of children with no health insurance	9.1
% of adults with Medicaid	6.0
Emergency departments per 1M pop.	 20.7
Hospital closures in 2006	0
Staffed inpatient beds per 100,000 pop.	387.8
Hospital occupancy rate per 100 staffed beds	64.9
Psychiatric care beds per 100,000 pop.	54.6
State collects data on diversion	Yes





MEDICAL LIABILITY ENVIRONMENT **C**

Lawyers per 10,000 pop.	16.2
Lawyers per physician	0.6
Lawyers per emergency physician	14.5
ATRA judicial hellholes (range 0 to -7)	-1
Malpractice award payments/100,000 pop.	1.4
Average malpractice award payments	\$255,804
Databank reports per 1,000 physicians	19.7
Patient compensation fund	No
Health court pilot project grant	No
Number of insurers writing medical liability policies per 1,000 physicians	5.0
Average medical liability insurance premium for primary care physicians	\$19,765
Average medical liability insurance premiums for specialists	\$91,838
Pretrial screening panels	No
Are pretrial screening panels' findings admissible as evidence?	N/A
Periodic payments	Upon request or agreement of party(ies)
Medical liability cap on non-economic damages	\$250,001-350,000
Additional liability protection for EMTALA-mandated emergency care	No
Joint and several liability abolished	Partially
State provides for case certification	Yes
Expert witness required to be of the same specialty as the defendant	No
Expert witness must be licensed to practice medicine in the state	No

QUALITY & PATIENT SAFETY ENVIRONMENT **C**




Funding for quality improvement within the EMS system	No
Funded state EMS medical director	Yes
Emergency medicine residents per 1M pop.	 13.3
Adverse event reporting required	No
Hospital-based infections reporting required	Yes
Mandatory quality reporting requirement	No
% of counties with E-911 capability	80.2
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	26.3
% of hospitals with electronic medical records	35.3
% of patients with acute myocardial infarction given PCI within 90 minutes of arrival	60
Number of Joint Commission reviewed sentinel events per 1M pop. (1995-2006)	13

PUBLIC HEALTH & INJURY PREVENTION **D-**

Traffic fatalities per 100,000 pop.	18.8
% of traffic fatalities alcohol related	 46.0
Front occupant restraint use (%)	77.2
Helmet use required for all motorcycle riders	Yes
Child safety seat/seat belt legislation (10 points possible)	5
% of children immunized, aged 19-35 months	 85.0
% of adults aged 65+ who received flu vaccine in the last 12 months	 72.2
% of adults aged 65+ who ever received pneumococcal vaccine	 67.8
Fatal occupational injuries per 1M workers	61.8
Homicides and suicides (non-motor vehicle) per 100,000 pop.	19.7
Unintentional fall-related fatal injuries per 100,000 pop.	8.7
Unintentional fire/burn-related fatal injuries per 100,000 pop.	1.6
Unintentional firearm-related fatal injuries per 100,000 pop.	0.4
Gun-purchasing legislation (8 points possible)	0
% of tobacco settlement funds spent on health-related services and programs	42.2
Total injury prevention funds per 1,000 pop.	\$224.78
Unintentional injury prevention funds per 1,000 pop.	\$25.38
Intentional injury prevention funds per 1,000 pop.	\$152.85
Fall injury prevention funds per 1,000 pop.	\$0.00
Infant mortality rate per 1,000 live births	7.5
% of adults with BMI > 30	27.2
Current smokers, % of adults	23.2
Binge alcohol drinkers, % of adults	16.5

DISASTER PREPAREDNESS **B**

Per capita federal disaster preparedness funds	\$9.72
Disaster preparedness funds used specifically for health care-related preparedness are tracked	Yes
All-hazards medical response plan or ESF-8 plan?	Yes
Plan shared with all EMS and essential hospital personnel?	NR
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	8
Accredited by the Emergency Management Accreditation Program	Yes
Written plan specifically for special needs patients	Yes
Written plan to supply medications for chronic conditions	Yes
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	Statewide
Statewide medical communication system with one layer of redundancy	Yes
Statewide patient tracking system	No
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.	14.3
ICU beds per 1M pop.	377.2
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.	425.3
Physicians registered in ESAR-VHP per 1M pop.	0.0
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	Yes
Additional liability protections for health care workers during a disaster	Yes, civil
% of RNs that received any emergency training	38.4
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	