

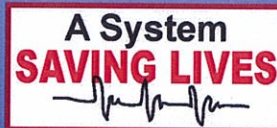


TRAUMA SYSTEM UPDATE



JOINT COMMITTEE ON PUBLIC HEALTH,
WELFARE AND LABOR

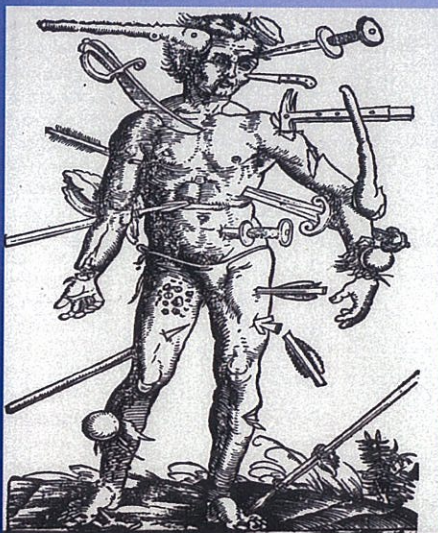
JUNE 27, 2014



Bill Temple, Branch Chief
Trauma/Injury Prevention
Arkansas Department of Health

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Why a Trauma System for Arkansas?



- Injury is the #1 killer of Arkansans between the ages of 1 and 44
- 2008 – Arkansas was the only state without a designated trauma center

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87th General Assembly 2009: A GOOD YEAR!



- Trauma System Act
- Primary Seat Belt Law
- Graduated Driver License Law
- Paul's Law – Prohibits Texting by Drivers of Motor Vehicles

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Trauma System Act Act 393 of 2009



- Trauma System: an organized and coordinated network that delivers a full range of care to patients with severe or life-threatening injuries
- Funded at just under \$20,000,000 per year



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Benefits of a Trauma System



- Reduces the number of injuries
- Shortens the time between injury and definitive care
- Allows for patients to receive definitive care within the “golden hour”
- Designation process ensures trauma centers have the right personnel and equipment to provide state-of-the-art care
- Result: **lives saved**

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Components of a Trauma System



- Injury prevention
- Pre-hospital emergency medical services
- Statewide communications system and call center
- Designated trauma centers
- Rehabilitation
- Trauma registry (data collection and analysis)
- Quality improvement
- Education

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Trauma Advisory Council



- 26 member body that provides guidance to the Arkansas Department of Health regarding system development
- Committees:
 - Finance
 - Hospital Designation
 - Quality Improvement
 - Emergency Medical Services
 - Injury Prevention
 - Rehabilitation
 - System Outcomes/Evaluation



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Injury Prevention



- Structural components:
 - Injury Prevention Section
 - Statewide Injury Prevention Program
 - Hometown Health Coalitions
 - Trauma Regional Advisory Councils
 - Partnerships with stakeholders
- Use of evidence-based interventions to address the leading causes of injury morbidity and mortality

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Primary Seat Belt Law

- Effective July 2009
- 10% increase in seat belt use since 2008
 - 2008: 70%
 - 2013: 77%

Source: National Highway Traffic Safety Administration (NHTSA)

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Graduated Driver License Law

- 22% reduction in motor vehicle crashes involving 16 year olds
- 59% reduction in fatal motor vehicle crashes involving 14-18 year olds

Source: Arkansas Center for Health Improvement, July 2012

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Emergency Medical Services

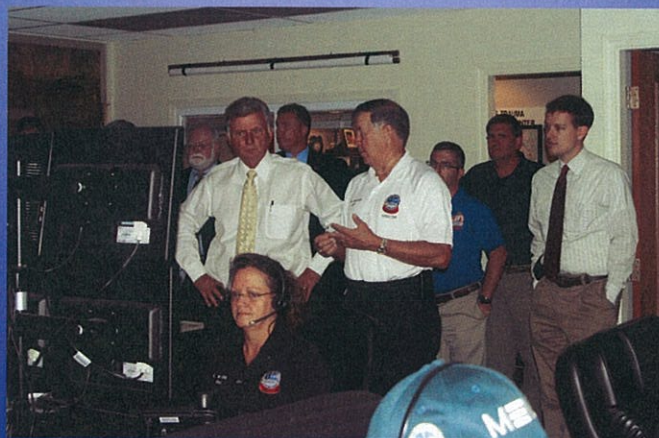


- Trauma radios purchased and placed in every ambulance in Arkansas
- Allows for direct communication with the Arkansas Trauma Communications Center in Little Rock
 - not possible prior to the trauma system



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Arkansas Trauma Communications Center



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Arkansas Trauma Communications Center



- Operations commenced on January 3, 2011
- Total EMS scene and hospital transfer calls: 49,581
- Average acceptance time for hospital-to-hospital transfers:

7 minutes and 21 seconds

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Hospital Designation



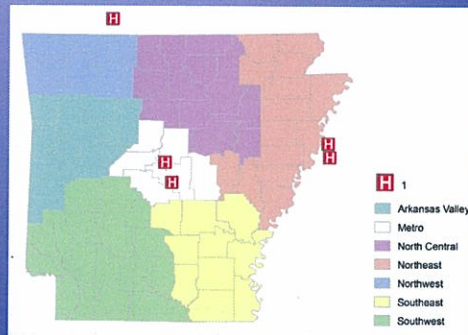
- 69 hospitals currently designated as trauma centers in Arkansas
- FY'15 funding per in-state trauma center:
 - 5 Level I: \$1,045,389
 - 5 Level II: \$522,694
 - 19 Level III: \$130,674
 - 40 Level IV: \$26,135

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Level I - comprehensive clinical care and community resource (education, research, and outreach)



- UAMS - Little Rock
- Arkansas Children's Hospital - Little Rock
- Regional One Medical Center - Memphis
- St. John's Regional Health Center - Springfield, Missouri
- Le Bonheur Children's Hospital - Memphis

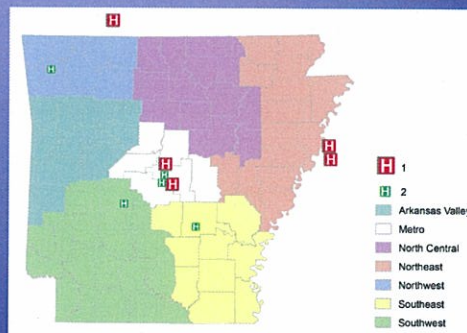


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Level II - comprehensive clinical care

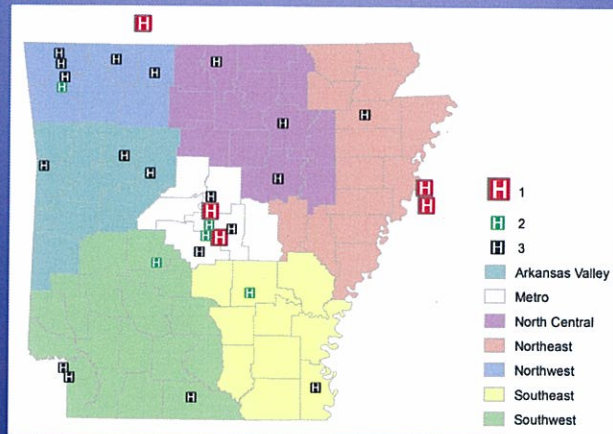


- Baptist Health Center - Little Rock
- St. Vincent Infirmary - Little Rock
- Jefferson Regional Medical Center - Pine Bluff
- St. Joseph Mercy Medical Center - Hot Springs
- Washington Regional Medical Center - Fayetteville

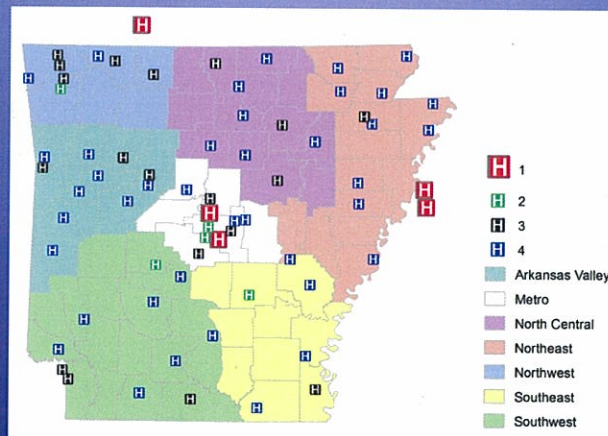


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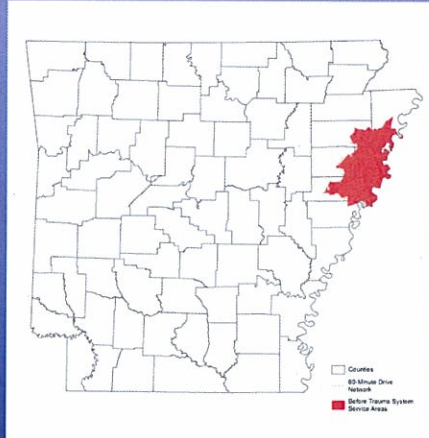
Level III - treatment of mild and moderate single system injuries - can treat most traumatic injuries



Level IV - stabilization and transfer - most major and moderate trauma bypass these facilities



Access to Trauma Centers (within a 60-minute drive)



2009 (3.0%)

Access to Trauma Centers (within a 60-minute drive)



2014 (99.7%)

Noteworthy Innovations



- Trauma Image Repository
- Telemedicine for Hand Injuries
- Quality Improvement
- Arkansas Trauma Education and Research Foundation

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Arkansas Trauma Education and Research Foundation



- 72% of general surgeons current in Advanced Trauma Life Support (ATLS)
- 74% of emergency physicians current in ATLS
- 87% of trauma nurses current in Trauma Nurse Coordinator Course
- All above national average

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Closing the Gap

2009-2011

- Nationally: Increase in overall injury mortality
- Arkansas: Decrease in overall injury mortality

Source: Arkansas Department of Health, Vital Statistics Branch; CDC, WISQARS (2011 - latest data available)

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Conclusions

- Rapid progress in implementing system
- Significant improvement in access to care
- Unique innovations to improve care
- Better trained workforce
- Improved Arkansas injury mortality data

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QUESTIONS?

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