

**TRAUMA SYSTEM UPDATE**  
**FOR THE**  
**HOUSE AND SENATE COMMITTEES**  
**ON PUBLIC HEALTH, WELFARE, AND LABOR**  
**MARCH 29, 2011**

**The Problem:**

Injury is the number one killer of Arkansans between the ages of one and 44. Arkansas' injury fatality rate is 30% higher than the national average and 70% higher with respect to deaths from motor vehicle accidents. This problem is exacerbated by Arkansas' rural road system, the twelfth largest in the nation. In addition, in a study conducted by the American College of Emergency Physicians in December 2008, Arkansas was cited as having the worst system of emergency care in the nation. Prior to the passage of the Trauma System Act by the Arkansas Legislature in 2009 (see below), Arkansas was one of three states without a trauma system and the only state without a designated trauma center.

**The Solution:**

Arkansas' new trauma system was authorized by Act 393 (Trauma System Act) of 2009. Funding for the system commenced on July 1, 2009 (Act 1383). The funds are derived from Arkansas' tobacco tax. Having designated trauma centers within a comprehensive system ensures that victims sustaining traumatic injuries will be transported to definitive care in the shortest possible time and that the treatment they receive is the best available. It is estimated that the new trauma system will save approximately 168 lives a year and \$193 million annually in our state. When combined with our primary seatbelt and graduated driver's license laws, also passed during the 2009 legislative session, the savings estimates go up to 206 lives and \$237 million annually.

**Implementation:**

The Arkansas Department of Health (ADH) is the agency responsible for implementation of the trauma system. There are numerous components of a successful system. The below information demonstrates the significant early progress ADH has made toward making Arkansas' trauma system a reality.

**Staffing:** Eighteen positions were funded by Act 393. A new Injury Prevention and Control Branch was created within ADH and all 18 positions have been filled. It is noted that one Registered Nurse did not begin work on her start date. This position was reposted and interviews are currently being conducted.

**Hospital Designation:** The designation process is intensive for hospitals. A great deal of preparation is required. Seventy-seven hospitals have submitted intent applications to become

trauma centers (from Level I, the highest, to Level IV, the lowest). The following hospitals have undergone site surveys and have been designated:

- Level I - University of Arkansas for Medical Sciences (UAMS) (Little Rock)
- Level I - Regional Medical Center at Memphis (The MED)
- Level I - Arkansas Children's Hospital (Little Rock)
- Level I - St. John's Regional Health Center (Springfield, Missouri)
- Level II - Jefferson Regional Medical Center (Pine Bluff)
- Level II - Baptist Health Medical Center (Little Rock)
- Level III – Christus Saint Michael Health System (Texarkana, Texas)

The pace of site surveys will increase in the coming months. The following hospitals are currently scheduled:

March: Baptist Health Medical Center (North Little Rock), Crittenden Regional (West Memphis), and St. Vincent Infirmiry Medical Center (Little Rock)

April: North Logan Mercy (Paris), John Ed Chambers Memorial (Danville), Fulton County Hospital (Salem), Five Rivers Medical Center (Pocahontas), Baptist Health Medical Center (Arkadelphia), NEA Baptist (Jonesboro), St. Bernards Medical Center (Jonesboro), and Little River Medical Center (Ashdown)

May: Howard Memorial Hospital (Nashville)

June: St. Mary's Regional Medical Center (Russellville)

(Note: Certain out-of-state hospitals are included in the Arkansas trauma system due to the number of Arkansas trauma patients treated at these hospitals. As hospitals applying for lower level designations become more knowledgeable of the designation process as well as their own capabilities to treat trauma patients, the number of hospitals requesting designation is expected to increase.)

**Funding for Hospitals:**

- Level I (5) - \$2,975,500 available; \$2,734,250 paid to date
- Level II (4) - \$2,000,000 available; \$1,500,000 paid to date
- Level III (22) - \$2,750,000 available; \$1,375,000 paid to date
- Level IV (42) - \$1,075,000 available; \$950,000 paid to date

As noted above, \$6,559,250 of the available \$8,800,500 in fiscal year (FY) 2010 start-up grants (75%) has been paid thus far to hospitals. The reason the remaining money is unpaid relates to how the start-up grants were structured. For example, Level I hospitals were eligible to receive \$1,000,000 in start-up funding, which is designed to support initial costs required to qualify for participation in the trauma system. Half of this was paid "up front" with the expenditures by the hospitals occurring after the money was received. The second half of the money can only be

paid once the hospital has been designated as a trauma center. Since most of the Level II-IV hospitals have not yet been designated, the remaining money cannot yet be paid.

In addition to the start-up grants mentioned above, the seven hospitals that have received trauma center designation thus far, as well as those which are designated as a result of site surveys in March and April, are eligible to receive FY 2011 sustaining funds. These funds are designed to support ongoing readiness costs for continued participation in the trauma system. Although the ADH's Trauma Section has to date received no invoices for sustaining funds from the designated hospitals, it is anticipated that up to \$7,620,000 of the \$13,613,250 available in this funding category for FY 2011 will be paid by June 30 of this year.

(Note: Hospitals will be eligible for 2011 sustaining funds only when they achieve designation, expend the second half of the FY 2010 start-up funds, provide ADH with "close-out" forms, and complete the required grant applications for new funding).

**Funding for Emergency Medical Service (EMS) Providers:** A total of 118 EMS providers and groups of providers are participating in the trauma system. A total of \$2,056,600 in start-up funding was available in grants to these providers. To date, \$2,024,126 (98%) has been paid.

Like hospitals, participating EMS providers are eligible to receive FY 2011 sustaining funds. To date, \$933,175 of the available \$3,115,000 (30%) has been paid. It is anticipated that the remaining funds will be paid by the end of the FY.

**Funding for EMS Training Sites:** Twenty-three training sites were eligible to participate in the trauma system during FY 2010. These sites provide training for emergency medical technicians and paramedics. A total of \$158,400 was available in FY 2010 start-up grant funding. To date, \$119,700 (76%) has been paid.

For FY 2011, 27 training sites submitted grant applications, thereby becoming eligible to participate in the system and receive sustaining funds. Although no training site has submitted an invoice to date, it is anticipated that the total available funds (\$245,000) will be distributed to these sites prior to the end of the FY.

(Note: EMS providers and EMS training sites will be eligible for FY 2011 funding only when they fully expend FY 2010 funds, provide ADH with "close-out" forms, and complete the required grant applications for new funding.)

**Funding for Associations:** The Arkansas Ambulance Association was eligible to receive \$33,334 in FY 2010 start-up grant funding, and did receive the entire amount. Although the Association is eligible to receive \$46,668 in FY 2011 sustaining funds, it has not invoiced for any of this amount to date. It is expected that these funds will be distributed by the end of the FY.

The Arkansas Emergency Medical Technician Association (AEMTA) was eligible to receive \$66,666 in FY 2010 start-up grant funding and was paid this amount. Although the AEMTA is

eligible to receive \$93,332 in FY 2011 sustaining funds, it has not invoiced for any of this amount to date. It is expected that these funds will be distributed by the end of the FY.

**Arkansas Trauma Call Center (ATCC):**

A competitively bid contract was signed with Metropolitan Emergency Medical Services (MEMS) in Little Rock to serve as the ATCC. The contract became effective on October 1, 2010 and is in the amount of \$906,531 for fiscal year (FY) 2011. Information technology infrastructure work at the ATCC has been completed and it began partial operations (hospital-to-hospital transfers) on January 3, 2011. Full operational capacity will be realized upon installation of trauma radios in all EMS ambulances (see below).

**Radio Communications Network:**

ADH is working closely with the Arkansas Department of Information Systems on this issue. The original plan was to utilize a "VHF solution" for the network, but an unexpectedly high rate of tower failures and other issues forced ADH to explore other options. A decision was made to utilize the existing Arkansas Wireless Information Network (AWIN) for this purpose. ADH entered into price negotiations with four vendors on a state contract, all of which have AWIN-capable radios. Motorola was selected and has supplied ADH with 600 radios for this purpose. Installation in EMS ambulances is underway and is expected to be completed by June 30, 2011.

**Governor's Trauma Advisory Council (TAC):** The TAC and its six subcommittees (Finance, Hospital Designation, Trauma Regional Advisory Councils, Injury Prevention, EMS, and Rehabilitation) have met on a monthly basis and furnished valuable guidance to ADH on development of the trauma system.

**Trauma Regional Advisory Councils (TRACs):** There are seven TRACs throughout Arkansas. All have met to address local needs such as regional destination protocols for EMS providers and performance improvement indicators and plans.

**Trauma Registry:** The Trauma Registry is operational statewide and is in the early stages of recording and tracking individual cases of traumatic injury from their inception through all phases of treatment, including rehabilitation. There are currently 30 hospitals reporting to the Registry with 2698 records entered.

**Website Development:** ADH has an external website at [www.healthy.arkansas.gov](http://www.healthy.arkansas.gov). A great deal of work has been done to create a wide variety of documents concerning hospital designation and the grant process for hospitals, EMS providers, and EMS training sites. In addition, ADH completed a three-hour training video for hospitals seeking trauma center designation and two videos dealing with the Arkansas Trauma Call Center. These are all located on the website under the Trauma "Quick Link" on the left-hand side of the home page.

**Injury Prevention:** A grant in the amount of \$497,000 for FY 2011 was made to the Injury Prevention Center (IPC) at Arkansas Children's Hospital in Little Rock. It became effective on

October 1, 2010. The IPC will implement the Statewide Injury Prevention Plan to reduce the burden of injury mortality and morbidity. The IPC will work closely with ADH's Hometown Health Improvement initiative to engage local stakeholders.

**Rehabilitation:** An intergovernmental professional services contract for \$29,800 was signed with the Arkansas Spinal Cord Commission. Beginning January 1, 2011, the Commission began a statewide needs assessment for rehabilitation. Rehabilitation is a critically important component of a successful trauma system and this study will identify gaps in coverage and make recommendations to the Governor's Trauma Advisory Council.

**Burns:** A grant for burn treatment readiness in the amount of \$250,000 for FYs 2011 and 2012 was made to the Burn Center at Arkansas Children's Hospital. This grant will allow the Burn Center to increase educational opportunities and research regarding burns, purchase equipment, and provide support for families of burn victims.

**Electronic Image Transfer:** A Memorandum of Agreement (MOA) with the University of Arkansas for Medical Sciences' Center for Distance Learning, for the purpose of enhancing the ability of hospitals to transfer images electronically, is very near implementation. The amounts of the MOA are \$178,000 for FY 2011 and \$377,850 for FY 2012. This MOA will allow a transferring hospital to electronically transfer CT scans, MRIs, and X-rays to receiving hospitals, thereby allowing the receiving hospitals to have appropriate physicians and equipment ready when the patient arrives. Current capability in this area is extremely limited (CT scans for stroke only in certain cases). This initiative will also lessen the need to re-radiate patients, which is especially concerning for children.

**Initiatives for FY 2012:**

- Prepare a Request for Proposal (RFP) for qualified entities to submit bids for the purpose of providing relevant training to hospital personnel to increase their readiness for trauma center designation
- Prepare an RFP for qualified entities to submit bids for the purpose of providing quality improvement expertise to hospitals and other relevant components of the trauma system
- Continue to provide funding for hospitals, EMS providers, and EMS training sites
- Ensure that trauma radios are placed in all ambulances in the state
- Ensure the continued develop of the seven Regional Trauma Advisory Councils and that these Councils have a meaningful, beneficial impact on the trauma system
- Prepare for and undergo a trauma system evaluation by the American College of Surgeons
- Prepare for and undergo an Injury Prevention Program evaluation by the Safe States Alliance
- Continue to work with the Governor's Trauma Advisory Council to identify funding opportunities which will benefit Arkansas' trauma system
- Secure an Injury Prevention Section Chief
- Monitor grants to ensure proper utilization of funds and accountability

