

ALABAMA DEPARTMENT OF PUBLIC HEALTH  
ADMINISTRATIVE CODE

CHAPTER 420-2-2  
ALABAMA STATEWIDE TRAUMA SYSTEM

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420-2-2-.01	<u>General.</u>

(1) Legal Authority for Adoption of Rules. Under and by virtue of authority vested in it by the Legislature of Alabama, Act 299, Regular Session, 2007 (§22-11D-1, et seq. *Code of Ala. 1975*), the State Board of Health does hereby adopt and promulgate the following rules to govern the Alabama Statewide Trauma System.

(2) Definitions.

- (a) The Board. The Alabama State Board of Health.
- (b) The Council. The Statewide Trauma Advisory Council.
- (c) The Department. The Alabama Department of Public Health.
- (d) Designated Trauma Center. A hospital that has met all the standards for trauma center designation as set out in these rules and that has been certified by the Department.
- (e) Designation. A formal determination by the Department that a hospital is capable of providing designated trauma care.
- (f) ED. Emergency Department.
- (g) EMT. Emergency Medical Technician.
- (h) The Fund. The Statewide Trauma System Fund.
- (i) Hospital. A health institution that has been licensed pursuant to the Board's Hospital Rules, Chapter 420-5-7, Ala. Admin. Code and that has a functioning ED.
- (j) ICU. Intensive Care Unit.
- (k) May. This indicates permissive requirements.
- (l) Office of EMS and Trauma. The Department's Office of Emergency Medical Services and Trauma.
- (m) OR. Operating Room.
- (n) QA/QI. Quality Assurance/Quality Improvement.
- (o) Regional Councils. The regional trauma advisory councils.
- (p) Regions. The trauma care regions.
- (q) The Registry. The Statewide Trauma Registry.
- (r) These Rules. Rules 420-2-2-.01 through 420-2-2-.14, Chapter 420-2-2, Alabama Statewide Trauma System, Ala. Admin. Code.
- (s) Shall. This indicates mandatory requirements.
- (t) Alabama TCC Operations Director. Trauma Communication Center Director.
- (u) Alabama TCC. Alabama Trauma Communication Center.
- (v) Pre-hospital Trauma Patient. A pre-hospital patient who meets trauma system entry criteria (see appendix E) and is

entered into the trauma system by calling the Alabama Trauma Communications Center and obtaining a unique identification number.

(w) Hospital Trauma Patient. A hospital patient who meets trauma system entry criteria (see appendix F) and is entered into the trauma system by calling the Alabama Trauma Communications Center and obtaining a unique identification number.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007. Code of Ala. 1975, §22-11D-1, et seq

**History: New Rule:** Filed February 18, 2009, Effective March 25, 2009.

#### **420-2-2-.02      Trauma Center Standards: Verification.**

Upon the receipt of advice and approval of the council, the board has adopted rules for verification and certification of trauma center status as set out in Appendix A.

**Author:** John Campbell, M.D.; Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et seq.)

**History: New Rule:** Filed March 20, 2008; effective April 24, 2008. **Repealed and Replaced:** Filed February 18, 2009; effective March 25, 2009. **Amended (Appendix A only):** Filed September 17, 2009; effective October 22, 2009. Amended (Appendix A only): Filed September 21, 2011; effective October 26, 2011. **Amended (Appendix A only):** Filed September 20, 2012; effective October 25, 2012. Amended (Appendix A only): Filed March 20, 2014; effective April 24, 2014.

#### **420-2-2-.03      Trauma Center Designation.**

(1) Types of Designation.

(a) Regular Designation. A regular designation may be issued by the Board after it has determined that an applicant hospital has met all requirements to be designated as a trauma center at the level applied for and is otherwise in substantial compliance with these rules.

(b) Provisional Designation. At its discretion, the Board may issue a provisional designation to an applicant hospital that has met all requirements to be designated as a trauma center at the level applied for, with exception to minor deviations from those requirements that do not impact patient care or the operation of a trauma region.

1. The provisional designation may be used for an initial designation or for an interim change in designation status to a lower level due to a trauma center's temporary loss of a component necessary to maintain a higher designation level.

2. A trauma center must submit a written corrective plan and interim operation plan for the provisional designation period including a timeline for corrective action to the Office of EMS and Trauma within 30 days of receiving a provisional designation.

3. A provisional designation shall not extend beyond 15 months. After the expiration date of the 15 month provisional designation period, an applicant hospital shall re-apply for regular designation once all the requirements for the level applied for have been met.

4. A trauma center may submit a written request to the Office of EMS and Trauma that a provisional designation be removed once all components of its corrective plan have been achieved. Following its receipt of such a request, the Department will conduct a focused survey on the trauma center. A regular designation shall be granted in the event it is confirmed that all components of the corrective plan have been achieved.

(c) Automotive Designation.

1. Trauma centers designated at Levels I-III by the American College of Surgeons (ACS) will be issued a regular designation by the Board, at that same level, after submitting an application and providing proof that the trauma center can meet ATS anesthesiologist requirements. The ATS will determine if an on-site survey revisit, to confirm resources, will be needed based upon the recommendation of the RTAC and/or the STAC. A final decision as provided in Rule 420-2-2-.03(4)(f)2, will not be required.

2. Trauma centers designated as a Level IV by ACS must meet state Level III designation criteria as set out in Appendix A in order to be issued a regular designation by the Board.

(2) Levels of Designation. There shall be three levels of trauma center designation. The criteria of each level is set out in Appendix A.

(3) Application Provision. In order to become a trauma center, a hospital must submit an application (attached to these rules as Appendix B) and follow the application process provided in paragraph (4) below.

(4) The Application Process. To become designated as a trauma center, an applicant hospital and its medical staff shall complete the Department's "Application for Trauma Center Designation". An applicant hospital shall submit the completed application via mail or hand delivery to the address listed on the application. Within 30 days of receipt of the application, the Department shall provide written notification to the applicant hospital of the following:

(a) That the application has been received by the Department;

(b) Whether the Department accepts or rejects the application for incomplete information;

(c) If accepted, the date scheduled for hospital inspection; and

(d) If rejected, the reason for rejection and a deadline for submission of a corrected "Application for Trauma Center Designation" to the Department.

(e) Upon receipt of a completed application by the Department, an application packet containing a pre-inspection questionnaire will be provided to the applicant hospital. The pre-inspection questionnaire must be returned to the Department one month prior to the scheduled inspection.

(f) The trauma center post-inspection process will proceed as listed below:

1. The inspection report will be completed two weeks after completion of the inspection.

2. A State and Regional review of the inspection report and a recommendation for or against designation will be made ninety days after completion of the inspection.

3. A final decision will be made known to the applicant hospital within 120 days of the completion of the inspection.

4. Focus visits may be conducted by the Department as needed.

(5) The Inspection Process. Each applicant hospital will receive an onsite inspection to ensure the hospital meets the minimum standards for the desired trauma center designation level as required by these rules. The Department's Office of EMS and Trauma staff will coordinate the hospital inspection process to include the inspection team and a scheduled time for the inspection. The hospital will receive written notification of the onsite inspection results from the Office of EMS and Trauma.

(6) Designation Certificates.

(a) A designation certificate will be issued after an applicant hospital has successfully completed the application and inspection process. The designation certificate issued by the Office of EMS and Trauma shall set forth the name and location of the trauma center, and the type and level of designation. The form of the designation certificate is attached to these rules as Appendix C.

(b) Separate Designations. A separate designation certificate shall be required for each hospital when more than one hospital is operated under the same management.

(7) Designation Contract.

(a) A designation contract will be completed after the hospital has successfully completed the application and inspection process. The designation contract shall be issued by the Office EMS and Trauma. It shall set forth the name and location of the trauma center and the type and level of designation.

(b) Separate Designation Contracts. A separate designation contract shall be required for each hospital when more than one hospital is operated under the same management.

(c) The form of the designation contract is attached to these rules as Appendix D.

(8) Basis for Denial of a Designation. The Department shall deny a hospital application for trauma center designation if the application remains incomplete after an opportunity for correction has been made, or if the applicant hospital has failed to meet the trauma center designation criteria as determined during the inspection.

(9) Suspension, Modification, and Revocation of a Designation.

(a) A trauma center's designation may be suspended, modified, or revoked by the Board for an inability, failure, or refusal to comply with these rules.

(b) The Board's denial, suspension, modification or revocation of a trauma center designation shall be governed by the Alabama Administrative Procedure Act, §41-22-1, et seq., Ala. Admin. Code.

(c) Hearings. Contested case hearings shall be provided in accordance with the Alabama Administrative Procedure Act, §41-22-1, et seq., and the Board's Contested Case Hearing Rules, Chapter 420-1-3, Ala. Admin. Code.

(d) Informal settlement conferences may be conducted as provided by the Board's Contested Case Hearing Rules, Chapter 420-1-3, Ala. Admin. Code.

**Author:** John Campbell, M.D., Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed February 18, 2009, Effective March 25, 2009. **Amended:** Filed September 20, 2012; effective October 25, 2012. **Amended:** Filed April 12, 2013; effective May 17 2013.

**420-2-2-.04**      **Statewide Trauma And Health Care Center Advisory Council.**

(1) Creation. There is established a Statewide Trauma and Health Care Center Advisory Council. The Council assists in the development of these rules and serves as a consultant to the Board on matters related to the statewide trauma system and other statewide coordinated health care systems that may be implemented.

(2) Subcommittees and workgroups.

(a) The Council may appoint subcommittees and workgroups to serve as consultants to the Council on matters related to the implementation of other statewide coordinated health care systems, such as ST segment elevation myocardial infarction (STEMI) and stroke, and the development of regulations and standards for such systems. When appointed, the Council shall consult with and rely upon the advice of subcommittees and workgroups prior to making decisions or recommendations to the Board.

(b) Subcommittees shall consist of Council members and workgroups may consist of non-Council members.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.)

**History: New Rule:** Filed February 18, 2009, Effective March 25, 2009. **Amended:** Filed September 17, 2015; effective October 22, 2015.

**420-2-2-.05**      **Trauma Care Regions.**

Trauma Care Regions will be the same as the EMS Regions as have been approved by the Board.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed May 21, 2008, Effective June 25, 2008.  
**Repealed and Replaced:** Filed February 18, 2009, Effective March 25, 2009.

**420-2-2-.06 Regional Trauma Advisory Councils.**

(1) Creation. Regional councils are established to advise, consult with, and accommodate specific regional needs. Each regional council shall provide data required by the Department or the Council to assess the effectiveness of the statewide trauma system

(2) Membership. Each regional council shall have a minimum of 10 members. The membership of the regional councils shall be appointed in the same manner as the Council is appointed and shall be composed of representatives of the same groups. The chair of each regional council shall be elected by its members to serve for four year term. The members shall represent the demographic composition of the region served and include representation for any out-of-state trauma center participating in the region, as far as practicable. Regional trauma advisory council members shall be entitled to reimbursement for expenses incurred in the performance of their duties as the same rate as state employees.

(3) Responsibilities. The regional trauma council is responsible for direct oversight and management of its specific regional trauma system. The regional council shall review the entire regional trauma program activities for appropriateness, quality, and quantity to include pre-hospital and hospital care. The regional trauma council shall decide the appropriate secondary patient care triage criteria for their specific region to ensure patients are routed to the closest and most appropriate hospital according to their injuries.

In addition, the regional council shall fulfill the responsibilities as listed below:

1. Maintain standards;
2. Collect data;
3. Evaluate data-determine audit filters;
4. Re-evaluate to determine effectiveness of corrective action;
5. Participate on Regional Trauma QI Committee;
6. Devise plan of corrective action for QI issues;

(4) Committees.



1. QA/QI Committees. The regional trauma advisory councils shall document the effectiveness of hospital and emergency medical service QA/QI evaluations through routine reports of these QA/QI activities provided by each trauma system entity in their specific region. The regional trauma council will routinely perform focused review of specific QA/QI items of pre-hospital and hospital trauma care activities as determined appropriate by the regional trauma council. Recommendations for action will be developed by the committee based on analysis of data/information evaluated during committee function. The regional trauma council will submit quarterly compliance reports to the Office of EMS and Trauma for review to ensure the system process is followed.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed May 21, 2008, Effective June 25, 2008.

**Repealed and Replaced:** Filed February 18, 2009; effective March 25, 2009. **Amended:** Filed September 20, 2012; effective October 25, 2012.

#### **420-2-2-.07      Patient Entry Criteria For Hospitals.**

Patients shall be entered into the Alabama Trauma System according to the criteria set out in Appendix F.

**Author:** John Campbell, M.D.

**Statutory Authority:** Code of Ala. 1975, §22-11D-1, et. seq., Alabama Legislature, Act 299, Regular Session, 2007.

**History: New Rule:** Filed December 17, 2008; effective January 21, 2009. **Amended (Appendix F only):** Filed September 17, 2009; effective October 22, 2009.

#### **420-2-2-.08      Patient Entry Criteria For Pre Hospital Providers.**

Refer to EMS Alabama Patient Care Protocols 1.16, Appendix G.

**Author:** Sarah Nafziger, M.D.; Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala, 1975, §22-11D-1, et. seq.)

**History: New Rule:** Filed February 18, 2009; effective March 25, 2009. **Repealed and New Rule:** Filed June 20, 2014; effective July 25, 2014. **Repealed and New Rule (Replaced Appendix H with G):** Filed March 16, 2016; effective April 30, 2016.

**420-2-2-.09      Statewide Trauma Registry.**

(1) Creation. There is established a Statewide Trauma Registry to collect data on the incidence, severity, and causes of trauma, including traumatic brain injury. The registry shall be used to improve the availability and delivery of pre-hospital or out-of-hospital care and hospital trauma care services.

(2) Data Elements. Each designated trauma center shall furnish the following data to the registry. See Appendix G for data elements.

(a) Injury Case Criteria for State Trauma Registry.

1. ICD-9 diagnosis code 800.00 - 959.9 and
2. Assigned an ATCC number
3. Admitted to hospital for 24 hours or greater or
4. Transferred from one hospital to another hospital or
5. Death resulting from the traumatic injury independent of hospital admission or hospital transfer status

(b) Excludes the following isolated injuries:

1. 905 - 909.9 (late effects of injury)
2. 910 - 924.9 (superficial injuries-including blisters, contusions, abrasions, and insect bites)
3. 930 - 939.9 (foreign bodies)

(3) Reporting. All cases of traumatic injuries meeting the trauma admission criteria, diagnosed, assigned an ATCC number or treated and admitted to a level I, II, or III trauma facility shall report to the Alabama Trauma Registry within 90 days of ED visit or facility admission or diagnosis as prescribed by these rules. Reports are to be submitted on a monthly basis.

(4) Confidentiality. All registry data shall be held confidential pursuant to state and federal laws, rules, and policies.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed February 18, 2009; effective March 25, 2009.

**420-2-2-.10 Centralized Dispatch And Communications System.**

Communications are critical to the function to the Trauma System.

(1) The Alabama TCC will be staffed 24-hours-a-day by personnel with specific in-depth knowledge of the Trauma System design, function, and protocols.

(2) It will be primary responsibility of the Alabama TCC to coordinate the Trauma System activities by maintaining, providing information and recommendations whenever needed to the field staff and hospital personnel in providing care to patients meeting the trauma system entry criteria. Oversight of day-to-day operations of the Alabama TCC will be responsibility of the Alabama TCC Operations Director.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed February 18, 2009; effective March 25, 2009.

**420-2-2-.11 Air Ambulance Activation Requirements.**

Refer to Guidelines for Early Activation of Helicopter Emergency Medical Services 7.9, Appendix I. Refer to Guidelines for Helicopter Transport of Trauma System Patients 7.10, Appendix J.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed February 18, 2009; effective March 25, 2009.

**420-2-2-.12 Quality Assurance/Quality Improvement.**

Quality Assurance and Quality Improvement (QA/QI) activities are a vital component of the trauma system. They are used to document and foster continuous improvement in performances and the quality of patient care. In addition, they will assist the Department in defining standards, evaluating methodologies, and utilizing the evaluation results from continued system improvement. The Department shall develop guidelines for the state and regional level trauma staff in regarding QA/QI activities.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed February 18, 2009; effective March 25, 2009.

**420-2-2-.13 Confidentiality.**

(1) State and Regional Trauma QA/QI members shall be provided access to all information, reports, statements, or memoranda reviewed by or furnished to the State and Regional Trauma QA/QI workgroups members; and any discussion, findings, conclusions or recommendations resulting from the review of the records by the State and Regional Trauma QA/QI workgroups are declared to be privileged and confidential. All information, reports, statements, or memoranda reviewed by or furnished to the State and Regional Trauma QA/QI workgroups shall be used only in the exercise of proper functions and duties of the State and Regional Trauma QA/QI workgroups.

(2) All information furnished to the State and Regional QA/QI workgroups shall include pertinent safety and health information associated with the case summary. All identifying patient information will be removed before preparing case summary.

(3) All information and records acquired or developed by the State and Regional Trauma QA/QI workgroups shall be secured and have restricted access and shall be destroyed when no longer of use.

(4) Statistical information and data may be released by the State and Regional Trauma QA/QI as long as no identifying patient information is provided.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed February 18, 2009; effective March 25, 2009.

**420-2-2-.14 Statewide Trauma System Fund.**

(1) The Statewide Trauma Fund has been created by §22-11D-9, Code of Ala. 1975. Funding allocations received from the Alabama State Legislature, and from gifts or other payments that may be received by the Department for the Fund, are to be distributed according to a methodology established by the Council and adopted by the Board.

(2) The following methodology of distribution and allocation of available funds is established.

(a) Two million dollars (\$2,000,000.00) of available funds shall be allocated for administrative costs incurred by the

Department's Office of EMS and Trauma and the Alabama Trauma Communication Center.

(b) The remaining available funds shall be distributed as follows:

1. Five percent (5%) shall be equally distributed to the six EMS and trauma regions.
2. Ninety-five percent (95%) shall be distributed to participating trauma centers.

(i) Fifty percent (50%) of this amount shall be distributed to in-state trauma centers based on level of designation (the Level of Care Pool) as follows:

(I) Thirty percent (30%) shall be equally distributed to Level I trauma centers.

(II) Thirty percent (30%) shall be equally distributed to Level II trauma centers.

(III) Forty percent (40%) shall be equally distributed to Level III trauma centers.

(ii) Fifty percent (50%) of this amount shall be distributed to in-state and out-of-state trauma centers based on volume and acuity (the Patient Volume/Acuity Pool). The amount to be distributed to each trauma center shall be calculated utilizing the following table:

Severity Category	ISS Score	ISS Severity Index
A	1-9	1.02
B	10-15	2.02
C	16-24	3.80
D	>24	6.57

Patients who are transferred within the trauma system will be assigned a Severity Category A for the transferring hospital; the receiving hospital will assign a Severity Category according to the patient's ISS score. The specific amount due a trauma center shall be computed as follows:

(I) Assign all cases an ISS severity index and category of A, B, C or D according to the table above.

(II) Calculate the number of cases treated by each trauma center which fall within each ISS Severity Category.

(III) Multiply the total number of ISS Severity Category A cases by the relative value assignment of 1.02 to arrive at the total number of Category A points.

(IV) Multiply the total number of ISS Severity Category B cases by the relative value assignment of 2.02 to arrive at the total number of Category B points.

(V) Multiply the total number of ISS Severity Category C cases by the relative value assignment of 3.80 to arrive at the total number of Category C points.

(VI) Multiply the total number of ISS Severity Category D cases by the relative value assignment of 6.57 to arrive at the total number of Category D points.

(VII) Add the points from Categories A, B, C and D to arrive at a total number of points for each trauma center.

(VIII) Sum the number of points from all categories and all trauma centers to arrive at a total number of points for all trauma centers.

(IX) Take the number of points for each trauma center and multiply that number by the total dollar amount in the Patient Volume/Acuity Pool available for distribution. Take the product of that calculation and divide the resulting number by the total number of points for all trauma centers.

(X) The resulting quotient is the dollar amount to be distributed to that trauma center.

(3) Not less than thirty percent (30%) of the funds received from the Level of Care Pool and the Patient Volume/Acuity Pool by Level I and II trauma centers shall be used to pay on-call stipends to surgical specialties taking trauma calls and to help offset the cost of trauma-related continuing medical education and professional liability insurance.

(a) Surgical specialties eligible for on-call stipends shall include general and trauma surgeons, orthopedic surgeons, neurosurgeons, and facial surgeons (ENT or plastics). Reimbursement may include the portion of time the physician's practice is devoted to trauma care and for taking call in-hospital versus at home.

(b) Emergency medical physicians shall not receive on-call stipends, but may receive funds to help offset the cost of trauma-related continuing medical education and professional liability insurance.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 (Code of Ala. 1975, §22-11D-1, et seq.)

**History: New Rule:** Filed January 19, 2011; effective February 23, 2011.

420-2-2-AA Appendix A - Alabama Trauma System Fund.**Alabama Trauma Center Designation****Trauma Facilities Criteria: APPENDIX A Trauma Rules**

The following table shows levels of categorization and their **essential (E)** or **desirable (D)** criteria necessary for designation as a Trauma Facility by the Alabama Department of Public Health

	Level I	Level II	Level III
<b>INSTITUTIONAL ORGANIZATION</b>			
Trauma Program (Attached)	E	E	E
Trauma Service (Attached)	E	E	-
Trauma Team (Attached)	E	E	E
Trauma Program Medical Director (Attached)	E	E	D
Trauma Multidisciplinary Committee (Attached)	E	E	D
Trauma Coordinator/ TPM (Attached)	E	E	E
<b>HOSPITAL DEPARTMENTS/ DIVISIONS/ SECTIONS</b>			
Surgery	E	E	E
Neurological Surgery	E	D	D
Neurological trauma liaison	E	-	-
Orthopedic Surgery	E	E	-
Orthopedic trauma liaison	E	E	-
Emergency medicine	E	E	-
Anesthesia <sup>3</sup>	E	E	-
*Pediatrics	E	D	-
<b>CLINICAL CAPABILITIES</b>			
Published oncall schedule	E	E	E
General Surgery (attending surgeon promptly available <sup>1</sup> to maintain green status)	E	E	D
Published backup schedule or written backup method <sup>2</sup>	E	D	D
Dedicated to single hospital when oncall	E	D	D
Anesthesia (promptly available <sup>3</sup> to maintain green status)	E	E	E
Emergency Medicine (Immediately available inhouse 24 hours/day)	E	E	E
Oncall and promptly available to maintain green status:			
Cardiac surgery	E	-	-
Hand surgery (does not include micro vascular/reimplantation)	E	D	-
Micro vascular/replant surgery	D		-
Neurologic Surgery	E	D	-
	E	D	-



	Level I	Level II	Level III
Dedicated to one hospital or backup call			
Obstetrics/gynecologic surgery <sup>4</sup>	E	D	-
Ophthalmic surgery	E	D	-
Oral/maxillofacial surgery	E	D	-
Orthopedic	E	E	D
*Pediatric Surgery	E	D	-
Dedicated to one hospital or backup call	E	D	-
Plastic surgery	E	D	D
Critical care medicine*to include neonatal/pediatric intensive care unit	E	D	-
*Pediatrics	E	E	D
Radiology	E	E	D
*Pediatric Radiology	D	D	-
Thoracic surgery	E	D	-
<b>CLINICAL QUALIFICATIONS</b>			
<b>General/ trauma surgeon</b>			
Current board certification or eligible	E	E	E
Average of 6 hours of trauma related CME/year <sup>5</sup>	E	E	D
ATLS completion	E	E	E
Trauma Multidisciplinary Committee Attendance/Peer review committee attendance > 50%	E	E	E
<b>Emergency Medicine</b>			
Board certification <sup>6</sup> or eligible	E	D	D
ATLS completion <sup>7</sup>	E	E	E
Average of 6 hours of trauma related CME/year <sup>5</sup>	E	E	-
Trauma Multidisciplinary Committee Attendance/Peer review committee attendance > 50%	E	E	-
<b>Neurosurgery</b>			
Current board certification or eligible	E	D	D
Average of 6 hours of trauma related CME/year <sup>5</sup>	E	D	D
ATLS completion	D	D	D
Trauma Multidisciplinary Committee Attendance/Peer review committee attendance > 50%	E	E	D
<b>Orthopedic surgery</b>			
Board certification or eligible	E	D	D
Average of 6 hours of trauma related CME/year <sup>5</sup>	E	E	D
ATLS Completion	D	D	D

	Level I	Level II	Level III
<b>FACILITIES/ RESOURCES/ CAPABILITIES</b>			

	Level I	Level II	Level III
Trauma Multidisciplinary Committee Attendance/ Peer review committee attendance > 50%	E	D	D
<b>Volume Performance</b>			
Trauma admissions 1200/year or 240 patients with ISS>15/Pediatric Centers 200 under the age of 16	E	-	-
Presence of surgeon at resuscitation	E	E	D
Presence of surgeon at operative procedures	E	E	E
<b>Emergency Department (ED)</b>			
Personnel designated physician director	E	E	E
<b>Equipment for resuscitation for patients of all ages</b>			
Airway control and ventilation equipment	E	E	E
Pulse oximetry	E	E	E
Suction devices	E	E	E
Drugs and supplies for emergency care of adult and pediatric patients	E	E	E
Electrocardiographoscilloscopedefibrillator with infant and pediatric paddles	E	E	E
Internal paddles	E	E	-
Special color coding of equipment based on age and size	E	E	E
CVP monitoring equipment	E	E	D
Standard IV fluids and administration sets	E	E	E
Largebore intravenous catheters	E	E	E
<b>Sterile surgical sets for:</b>			
Airway control/ cricothyrotomy	E	E	E
Thoracostomy	E	E	E
Venous cutdown	E	E	E
Central line insertion	E	E	-
Thoracotomy	E	E	-
Peritoneal lavage	E	E	E
Arterial catheters	E	D	D
Ultrasound	E	E	D
Drugs necessary for emergency care	E	E	E
Xray available to maintain green status <sup>11</sup>	E	E	D
Cervical traction devices	E	E	D
Broselow tape	E	E	E
Rapid infuser system	E	E	D
Qualitative endtidal CO <sub>2</sub> determination	E	E	E

	Level I	Level II	Level III
Communications with EMS vehicles	E	E	E
<b>OPERATING ROOM</b>			
Immediately available to maintain green status <sup>8</sup>	E	D	D
<b>Operating Room Personnel</b>			
In house to maintain green status <sup>8</sup>	E	-	-
Available to maintain green status	-	E	E
<b>Age Specific Equipment</b>			
Cardiopulmonary bypass	E	-	-
Operating microscope	D	D	-
<b>Thermal Control Equipment</b>			
For patient	E	E	E
For fluids and blood	E	E	E
Xray capability, including carm image intensifier	E	E	E
Endoscopes, bronchoscopes	E	E	D
Craniotomy instruments	E	D	-
Equipment for long bone and pelvic fixation	E	E	D
Rapid infuser system	E	E	D
<b>Post Anesthetic Recovery Room (SICU is acceptable)</b>			
Registered nurses available to maintain green status	E	E	-
Equipment for monitoring and resuscitation of adult and pediatric patients	E	E	E
Intracranial pressure monitoring equipment	E	D	-
Pulse oximetry	E	E	E
Thermal control	E	E	E
<b>Intensive or Critical Care Unit for Injured Patients</b>			
Registered nurses with trauma education <sup>13</sup>	E	E	-
Designated surgical director or surgical codirector <sup>12</sup>	E	D	D
Surgical ICU service physician inhouse 24 hours/day (Emergency physician will satisfy this requirement)	E	D	-
Equipment for monitoring and resuscitation	E	E	-
Intracranial monitoring equipment	E	-	-
Pulmonary artery monitoring equipment	E	E	-
<b>Respiratory Therapy Services</b>			

	Level I	Level II	Level III
Available inhouse to maintain green status	E	E	D
Oncall to maintain green status	-	-	D
<b>Radiological services</b>			
In house radiology technologist to maintain green status	E	E	D
Angiography	E	D	-
Sonography	E	E	D
Computer Tomography (CT)	E	E	D
In house CT technician	E	-	-
Magnetic Resonance Imaging (Technician not required in house)	E	D	-
<b>Clinical laboratory services</b> (Available to maintain green status)	E	E	E
Standard analyses of blood, urine, and other body fluids, including microsampling when appropriate	E	E	E
Blood typing and crossmatching	E	E	E
Coagulation studies	E	E	E
Comprehensive blood bank or access to a community central blood bank and adequate storage facilities	E	E	E
Blood gasses and pH determinations	E	E	E
Microbiology	E	E	E
<b>Acute Hemodialysis</b>	E	E	E
Inhouse (staff not required inhouse for green status)	E	-	-
<b>Burn Care - Organized</b>			
In house	D	-	-
<b>Acute Spinal Cord Management</b>			
Inhouse	E	D	-
<b>REHABILITATION SERVICES</b>			
Physical therapy	E	E	D
Occupational therapy	E	D	D
Speech therapy	E	D	-
Social Service	E	E	D
<b>PERFORMANCE IMPROVEMENT</b>			
Performance improvement programs <sup>14</sup>	E	E	E
Trauma registry	-	-	-
Participate in state registry	E	E	E
Audit of all trauma deaths	E	E	E
Morbidity and mortality review	E	E	E
Trauma conferencemultidisciplinary	E	E	D

	Level I	Level II	Level III
Medical nursing audit	E	E	E
Review of prehospital trauma care <sup>9</sup>	E	E	E
<b>CONTINUING EDUCATION/OUTREACH</b>			
General Surgery residency program	D	-	-
ATLS provide/ participate	E	D	D
Programs provided by hospital for:			
Staff/community physicians (CME)	E	E	D
Nurses	E	E	D
Allied health personnel	E	E	-
Feedback provided to prehospital personnel <sup>10</sup>	E	E	E
<b>PREVENTION</b>			
Collaboration with other institutions for injury control and prevention	E	D	D
Designated prevention coordinators/pokesman for injury control	E	D	-
Outreach activities (some component to be pediatrics)	E	D	D
Information resources for public	E	D	-
Collaboration with existing national, regional and state programs	E	E	E
Coordination and/or participation in community prevention activities	E	E	E
<b>RESEARCH</b>			
Trauma registry performance improvement activities	E	E	E
Research committee	D	-	-
Identifiable IRB process	D	-	-
Extramural educational presentations	D	D	-
Number of scientific publications	D	-	-

<sup>1</sup> In both Level I and Level II facilities 24-hour in-house availability is the most direct method for the attending surgeon to provide care. In hospitals with residency programs, a team of physicians and surgeons that can include the Emergency Department Physicians, Surgical Residents, or Trauma Residents may start evaluation and treatment allowing the attending surgeon to take call outside the hospital if he/she can arrive. For hospitals without residency programs, the attending surgeon may take call from outside the hospital but should be promptly available. Promptly available for Level I facilities will be 15 minutes response time for 80 percent of trauma system patients except for EMT Discretion. Levels II and III response time will be 30 minutes. Compliance with these requirements will be monitored by the hospital's quality improvement program and the ATS Trauma Registry.

<sup>2</sup> If there is no published back-up call schedule there must be a written procedure of how to identify or locate another surgeon when needed and this should be monitored by the quality improvement plan.

<sup>3</sup> Anesthesiologist will be available in-house 24 hours a day for Level I trauma centers. In Level II and III trauma centers, anesthesiologist or CRNA will be available within 30 minutes response time. In Pediatric Level I trauma centers, anesthesiologist will be available in-house 24-hours a day. Requirements may be fulfilled by a Pediatric Emergency Attending Physician, Pediatric Emergency Fellow, or a Senior Anesthesia Resident CA-2/CA-3 (PGY-3/PGY-4).

<sup>4</sup> AL licensed specialty pediatric facilities, which are PPS exempt under Title 42 USC Section 1395ww(d)(1)(B)(iii) and receive funding under Title 42 USC 256e shall not be required to have an obstetric/gynecologic surgery service but should have a transfer agreement for OB-GYN surgery services.

<sup>5</sup> An average of 18 hours of trauma CME every three years is acceptable. An average of 3 of the 18 hours should focus on pediatrics.

<sup>6</sup> Physicians may be board certified in Emergency Medicine or Pediatric Emergency Medicine by an ABMS- or AOA-recognized board, or may be board certified in a primary care specialty if they have extensive experience in management of trauma patients. \*Level I and II trauma facilities may have an affiliation with pediatric hospitals to fulfill added pediatric requirements.

<sup>7</sup> Physicians not board certified in Emergency Medicine or Pediatric Emergency Medicine by an ABMS- or AOA-recognized board must maintain their ATLS certification. There will be a three year grace period for emergency department staff to become compliant with this requirement

<sup>8</sup> An operating room must be adequately staffed and immediately available in a Level I trauma center to remain available (green) to the trauma system. This is met by having a complete operating room team in the hospital at all times, so if an injured patient requires operative care, the patient can receive it in the most expeditious manner. These criteria cannot be met by individuals who are also dedicated to other functions within the institution. Their primary function must be the operating room.

An operating room must be adequately staffed in 30 minutes or readily available in a Level II trauma center to remain available (green) to the trauma system. The need to have an in-house OR team will depend on a number of things, including patient population served, ability to share responsibility for OR coverage with other hospital staff, prehospital communication, and the size of the community served by the institution. If an out-of-house OR team is used, then this aspect of care must be monitored by the performance improvement program.

<sup>9</sup> All levels of Trauma Centers should monitor prehospital trauma care. This includes the quality of patient care provided, patients brought by EMS and not entered into the trauma system but had to be entered into the trauma system by the hospital (under triage), and patients entered into the trauma system by EMS that did not meet criteria (over triage).

<sup>10</sup>Hospitals must complete and return to the RTAC the initial patient findings, treatment provided and outcome at the end of the first 24 hours. This should be noted on the ATCC patient record.

<sup>11</sup>Level III X-ray services will be available promptly after hours and on weekends.

<sup>12</sup>Level I director of surgical critical care team will be surgical critical care board certified except for pediatric facilities that have 24 hours in- house pediatric intensivist.

<sup>13</sup>Some portion of education should be pediatric based.

<sup>14</sup>Includes adults and pediatrics.

## ATTACHMENT (1 OF 3) TO RULE 420-2-2-.02, APPENDIX A

## ALABAMA TRAUMA SYSTEM (ATS)

## INSTITUTIONAL ORGANIZATION

## LEVEL I

The purpose of this document is to primarily assist Level I, Level II, and Level III trauma hospitals with suggestions of composition, organization, and process for the institutional and organizational aspects of trauma care. It is recognized that the institutional organization for each level ATS hospital differs. A suggestion of use of the American College of Surgeons (ACS) Resources for the Optimal Care of Trauma Patients is made for all ATS Level hospitals.

**The Trauma Program**

The trauma program involves multiple care disciplines and departments within the hospital that transcend normal departmental hierarchies. Because the best trauma care begins at the scene of an injury through the acute care setting to discharge from a rehabilitation center, the trauma program should have appropriate representation from all phases of care. Representatives of all disciplines and hospital departments involved in trauma patient care provide the appropriate skills, as team members working in concert, to implement treatment based on a prioritized plan of care. To ensure optimal and timely care, a multidisciplinary trauma program must continuously evaluate its processes and outcomes.

**The Trauma Medical Director**

The trauma medical director is the surgeon who leads the multidisciplinary activities of the trauma program. The trauma medical director must be a board-certified surgeon (usually a general surgeon) or an American College of Surgeons Fellow with special interest in trauma care and must participate in trauma call and be current in Advanced Trauma Life Support (ATLS).

Membership and active participation in regional or national trauma organizations is essential for the trauma director in Level I trauma centers.

The trauma medical director's responsibility extends beyond the technical skills of surgery. The trauma medical director must



have the authority to manage all aspects of trauma care. The trauma medical director authorizes trauma service privileges of the on-call panel, works in cooperation with nursing administration to support the nursing needs of trauma patients, develops treatment protocols along with the trauma team, and coordinates the performance improvement and peer review processes. The trauma medical director must have the authority to correct deficiencies in trauma care and exclude from trauma call the trauma team members who do not meet specified criteria. With the assistance of the hospital administrator and the trauma program manager, the trauma medical director is responsible for coordinating the budgetary process for the trauma program. The trauma medical director will identify representatives from neurosurgery, orthopedic surgery, anesthesiology, emergency medicine, and other appropriate disciplines to determine which physicians from their disciplines are qualified to be members of the trauma program and on-call panel.

### **The Trauma Team**

The trauma team consists of physicians, nurses, and allied health personnel. The size and composition of the team will vary with hospital size, the severity of the injury, and the corresponding level of trauma team activation. A high-level response to a severely injured patient must include the following: (1) a general surgeon; (2) surgical and emergency residents, as available; (3) emergency department nurses, including a scribe nurse; (4) laboratory technician; (5) a radiology technologist; (6) a critical care nurse; (7) an anesthesiologist or a certified registered nurse anesthetist; (8) an operating room nurse; (9) security officers, if needed; and (10) a chaplain or social worker.

In contrast, the trauma team's response to a less severely injured patient may initially consist of only an emergency physician and the emergency department nurses until the general surgeon arrives. The team leader must be a trauma surgeon. The criteria for trauma activation must be clearly defined by the trauma center and continuously evaluated by the Quality Assurance (QA) program and patient safety program.

A preplanned and coordinated approach defining which patients need to be seen in consultation by or admitted to the trauma service or other specialty services should be in place. Programs that admit more than 10 percent of injured patients to nonsurgical services must demonstrate the appropriateness of that practice through the QA program and patient safety program.

### **The Trauma Coordinator (TC)**

The TC is fundamental to the development, implementation, and evaluation of the trauma program. In addition to administrative ability, the TC must show evidence of educational preparation and clinical experience in the care of injured patients. The TC works in close collaboration with the trauma medical director and complements the director's efforts. A constructive, mutually supportive relationship between these key leaders is important to the success of the program.

The TC may be a full-time registered nurse and is responsible for the organization of services and systems necessary for the multidisciplinary approach to providing care to trauma patients. The TC, in particular, assumes day-to-day responsibility for process and performance improvement activities as they relate to nursing and ancillary personnel and assists the trauma medical director in carrying out the same functions for the physicians. Ultimate accountability for all activities of the trauma program resides with the trauma medical director. The role of the TC in the educational, clinical, research, administrative, and outreach activities of the trauma program is determined by the needs of the trauma medical director and the institution.

Administrative and budgetary support will be provided for the TC. Secretarial and clinical nursing personnel help fulfill needs for outreach, concurrent case review, and discharge planning. The registrar, secretary, and nurse clinician(s) must be supervised by the TC.

### **The Trauma Service (TS)**

A trauma service must represent a structure of care for injured patients. The service includes personnel and other resources necessary to ensure appropriate and efficient provision of care. In a Level I trauma center, seriously injured patients must be admitted to or evaluated by an identifiable surgical service staffed by credentialed trauma providers. Sufficient infrastructure and support to ensure adequate provision of care must be provided for this service. To be sufficient, the infrastructure and support must require additional qualified physicians, residents, nurse practitioners, physician's assistants, or other physician extenders. The number and type of individuals required for a trauma service should be determined by the volume of patients requiring care and the complexity of their conditions. In teaching facilities, the requirements of the Residency Review Committee must also be met.

The trauma service and individual surgeons who make up the TS must admit trauma patients to the floor and Trauma Intensive Care Unit (TICU) as well as be the primary physician for the patient until discharge. The director of the surgical critical care team must be a board certified or board eligible surgeon.

The director of the TICU must also be board certified in critical care.

### **The Trauma Registrar (TR)**

The trauma registrar is an important member of the trauma team. Trauma registrars may be from diverse backgrounds such as nursing, medical records, computer science, medical informatics, and other fields. They must work directly with the trauma team and report to the TC. The TR should also complete four hours of registry-specific continuing education each year which the Alabama Department of Public Health/Office of EMS and Trauma (ADPH/OEMS&T) will provide. Technical support, locally and from the ADPH/OEMS&T, is available to assist with these training requirements. It is the TR's responsibility to complete the ATS LifeTrac Form on each patient and e-mail or fax each patient's completed form to the Birmingham Regional Emergency Medical Services System.

The trauma medical director and the trauma coordinator must ensure and document dissemination of information and findings from the peer review meetings to the noncore surgeons on the trauma call panel.

### **Trauma Multidisciplinary Committee or Peer Review**

There must be a multidisciplinary committee or peer review committee with the trauma medical director, along with representatives from emergency medicine, anesthesia, the trauma coordinator, and hospital administration. A purpose of the committee is to improve trauma care along with other medical care by reviewing all deaths, complications, and sentinel events with objective identification of issues and appropriate responses. The aforementioned representatives must attend at least 50 percent of these multidisciplinary or peer-review committee meetings. This meeting may be held monthly, however, the frequency is to be determined by the medical director based on the needs of the performance improvement and patient safety programs.

## ATTACHMENT (2 OF 3) TO RULE 420-2-2-.02, APPENDIX A

**ALABAMA TRAUMA SYSTEM (ATS)****INSTITUTIONAL ORGANIZATION****LEVEL II**

The purpose of this document is to primarily assist Level I, Level II, and Level III trauma hospitals with suggestions of composition, organization, and process for the institutional and organizational aspects of trauma care. It is recognized that the institutional organization for each level ATS hospital differs. A suggestion of use of the American College of Surgeons (ACS) Resources for the Optimal Care of Trauma Patients is made for all ATS Level hospitals.

**The Trauma Program**

The trauma program involves multiple care disciplines and departments within the hospital that transcend normal departmental hierarchies. Because the best trauma care begins at the scene of an injury through the acute care setting to discharge from a rehabilitation center, the trauma program should have appropriate representation from all phases of care. Representatives of all disciplines and hospital departments involved in trauma patient care provide the appropriate skills, as team members working in concert, to implement treatment based on a prioritized plan of care. To ensure optimal and timely care, a multidisciplinary trauma program must continuously evaluate its processes and outcomes.

**The Trauma Medical Director**

The trauma medical director is the surgeon who leads the multidisciplinary activities of the trauma program. The trauma medical director must be a board-certified surgeon (usually a general surgeon). The trauma medical director must have had Advanced Trauma Life Support (ATLS), but it does not have to be current.

The trauma medical director's responsibility extends far beyond the technical skills of surgery. The trauma medical director will have the authority to manage all aspects of trauma care. The trauma medical director authorizes trauma service privileges of the on-call panel, works in cooperation with nursing administration to support the nursing needs of trauma

patients, develops treatment protocols along with the trauma team, and coordinates the performance improvement and peer review processes. The trauma medical director will have the authority to correct deficiencies in trauma care and exclude from trauma call the trauma team members who do not meet specified criteria. With the assistance of the hospital administrator, the trauma medical director is responsible for coordinating the budgetary process for the trauma program. The trauma medical director should identify representatives from neurosurgery, orthopedic surgery, anesthesiology, emergency medicine, and other appropriate disciplines to determine which physicians from their disciplines are qualified to be members of the trauma program and on-call panel.

### **The Trauma Team**

The trauma team consists of physicians, nurses, and allied health personnel. The size and composition of the team will vary with hospital size, the severity of the injury, and the corresponding level of trauma team activation. It is anticipated that primarily physiologically stable patients will be routed to a Level II ATS hospital. However, patient choice, a trauma patient with an airway unable to be secured, hemodynamically unstable patient with no IV secured, or uncontrolled hemorrhage in a patient, an unstable patient beyond a reasonable transport time to an ATS Level I hospital, or a non-EMS delivered patient may arrive at a Level II ATS hospital. Thus, there is a need for a graded response by the Level II hospital to meet the potential varied patient arrivals. The determination of the level of response should be made by the emergency medical doctor receiving the information in the emergency department.

A high-level response to a severely injured unstable patient must include the following: (1) a general surgeon; (2) an emergency physician; (3) emergency department nurses, including a scribe nurse; (4) a laboratory technician; (5) a radiology technologist; (6) a critical care nurse; (7) an anesthesiologist or a certified registered nurse anesthetist; and (8) security officers.

The trauma team's response to a less severely injured stable patient may consist of an emergency medicine physician and the emergency department nurses (Level III) until the general surgeon arrives, if needed. The criteria for trauma activation should be clearly defined by the trauma center and continuously evaluated by the Quality Assurance (QA) program and patient safety program.

### **The Trauma Coordinator (TC)**

The TC is fundamental to the development, implementation, and evaluation of the trauma program. In addition to administrative

ability, the TC must show evidence of educational preparation and clinical experience in the care of injured patients. The TC works in close collaboration with the trauma medical director and complements the director's efforts. A constructive, mutually supportive relationship between these key leaders is important to the success of the program.

The TC may be a full-time registered nurse and is responsible for the organization of services and systems necessary for the multidisciplinary approach to providing care to trauma patients. The TC, in particular, assumes day-to-day responsibility for process and performance improvement activities, as they relate to nursing and ancillary personnel, and assists the trauma medical director in carrying out the same functions for the physicians. Ultimate accountability for all activities of the trauma program resides with the trauma medical director. The role of the TC in the educational, clinical, research, administrative, and outreach activities of the trauma program is determined by the needs of the trauma medical director and the institution.

Administrative and budgetary support will be provided for the TC. Secretarial and clinical nursing personnel help fulfill needs for outreach, concurrent case review, and discharge planning. The registrar, secretary, and nurse clinician(s) must be supervised by the TC.

### **The Trauma Service (TS)**

A trauma service represents a structure of care for injured patients. The service includes personnel and other resources necessary to ensure appropriate and efficient provision of care. The precise nature of a trauma service may vary based on specific needs of the medical facility, available personnel, and the quantity of resources. In a Level II trauma center, seriously injured patients must be admitted to or evaluated by an identifiable surgical service staffed by credentialed trauma providers. Sufficient infrastructure and support to ensure adequate provision of care must be provided for this service. To be sufficient, the infrastructure and support must require additional qualified physicians, residents, nurse practitioners, physician's assistants, or other physician extenders. In teaching facilities, the requirements of the Residency Review Committee must also be met.

### **The Trauma Registrar (TR)**

The trauma registrar is an important member of the trauma team. Trauma registrars may be from diverse backgrounds such as nursing, medical records, computer science, medical informatics, and other fields. They must work directly with the trauma team and report to the TC. The TR also should complete four hours of registry-specific continuing education each year

which the Alabama Department of Public Health/Office of EMS and Trauma (ADPH/OEMS&T) will provide. Technical support, locally and from the ADPH/OEMS&T, is available to assist with these training requirements. It is the TR's responsibility to complete the ATS LifeTrac Form on each patient and e-mail or fax each patient's completed form to the Birmingham Regional Emergency Medical Services System.

#### **Trauma Multidisciplinary Committee or Peer Review**

There is a multidisciplinary/peer review committee chaired by a medical director or designee, with representatives from orthopedic surgery, emergency medicine, anesthesia, and hospital administration. The purpose of the committee is to improve trauma care along with other types of medical care by reviewing deaths, complications, and sentinel events with objective identification of issues and appropriate responses. The aforementioned representatives must attend at least 50 percent of these multidisciplinary or peer-review committee meetings. Although this meeting is usually held monthly, the frequency is to be determined by the trauma medical director based on the needs of the performance improvement and patient safety programs.

General surgery attendance at the committee or peer review meetings is essential. The general surgeon is the foundation of care in the trauma program in a Level II hospital. All general surgeons on the trauma call panel should attend meetings if possible. At a minimum, the surgeons who constitute the core of trauma call coverage must each attend at least 50 percent of these meetings. This core group must be defined by the trauma medical director. This core group must take at least 60 percent of the total trauma call hours each month. Evidence for appropriate participation and acceptable attendance must be documented. The trauma medical director must ensure and document dissemination of information and findings from the peer review meetings to the noncore surgeons on the trauma call panel.

## ATTACHMENT TO RULE 420-2-2-.02, APPENDIX A

## ALABAMA TRAUMA SYSTEM (ATS)

## INSTITUTIONAL ORGANIZATION

## LEVEL III

The purpose of this document is to primarily assist Level I, Level II, and Level III trauma hospitals with suggestions of composition, organization, and process for the institutional and organizational aspects of trauma care. It is recognized that the institutional organization for each level ATS hospital differs. A suggestion of use of the ACS Resources for the Optimal Care of Trauma Patients is made for all ATS Level hospitals.

**The Trauma Program**

The trauma program involves multiple care disciplines and departments within the hospital that transcend normal departmental hierarchies. Because the best trauma care begins at the scene of an injury through the acute care setting to discharge from a rehabilitation center, the trauma program should have appropriate representation from all phases of care. Representatives of all disciplines and hospital departments involved in trauma patient care should provide team members working in concert to give care based on a prioritized plan. Optimal and timely care, in a multidisciplinary trauma program, is continuously evaluated by processes and outcomes.

**The Trauma Medical Director**

The trauma medical director is the surgeon or emergency medical doctor who leads the multidisciplinary activities of the trauma program.

The trauma medical director's responsibility extends far beyond the technical skills of trauma care. The trauma medical director should have the authority to manage trauma care. The trauma medical director coordinates trauma service privileges of the on-call panel, works in cooperation with nursing administration to support the nursing needs of trauma patients, develops treatment protocols along with the trauma team, and coordinates the performance improvement and peer review processes. The trauma medical director must have the authority to correct deficiencies in trauma care. With the assistance of



the hospital administrator and the trauma coordinator, the trauma medical director is responsible for coordinating the budgetary process for the trauma program. The trauma medical director should identify representatives from surgery, anesthesiology, emergency medicine, and other appropriate disciplines to determine which physicians from their disciplines are qualified to be members of the trauma program and on-call panel.

### **The Trauma Team**

The trauma team consists of physicians, nurses, and allied health personnel. The size and composition of the team will vary with hospital size, hospital trauma level, the severity of the injury, and the corresponding level of trauma team activation. It is anticipated that only physiologically stable patients will be routed to a Level III ATS hospital. However, patient choice, a trauma patient with an airway unable to be secured, hemodynamically unstable patient with no IV secured, or uncontrolled hemorrhage in a patient, an unstable patient beyond a reasonable transport time to an ATS Level I or II hospital, or a non-EMS delivered patient may arrive at a Level III ATS hospital. Thus, there is a need for a graded response by the Level III hospital to meet the potential varied patient arrivals. The determination of the level of response should be made by the emergency medical doctor receiving the information in the emergency department.

A high-level response to a severely injured unstable patient should include the following: (1) a general surgeon; (2) an emergency physician; (3) emergency department nurses, including a scribe nurse; (4) a laboratory technician; (5) a radiology technologist; (6) a critical care nurse; (7) an anesthesiologist or a certified registered nurse anesthetist; and (8) security officers.

The trauma team's response to a less severely injured stable patient usually consists of an emergency medicine physician and the emergency department nurses (Level III) until the general surgeon arrives, if needed. The criteria for trauma activation should be clearly defined by the trauma center and continuously evaluated by the Quality Assurance (QA) program and patient safety program.

### **The Trauma Coordinator (TC)**

The TC is fundamental to the development, implementation, and evaluation of the trauma program. The TC works in close collaboration with the trauma medical director and complements the director's efforts. A constructive, mutually supportive relationship between these key leaders is important to the success of the program.

The TC, usually a registered nurse and most likely the emergency department nurse manager, is responsible for the organization of services and systems necessary for the multidisciplinary approach to providing care to trauma patients. The TC provides day-to-day responsibility for process and performance improvement activities, as they relate to nursing and ancillary personnel, and assists the trauma medical director in carrying out the same functions for the physicians. Accountability for all activities of the trauma program resides with the medical director and the TC. The role of the TC in the educational, clinical, research, administrative, and outreach activities of the trauma program is determined by the needs of the trauma medical director and the institution.

Administrative and budgetary support is needed for the TC. The registrar, secretary, and nurse clinician(s) must be supervised by the TC.

### **The Trauma Registrar (TR)**

The trauma registrar is an important member of the trauma team. Trauma registrars may be from diverse backgrounds such as nursing, medical records, computer science, medical informatics and other fields. The TR must work directly with the trauma team and report to the TC or may be the TC in smaller Level III hospitals. Trauma registrars will receive initial training as the Alabama State Trauma Registry is rolled out. They also must complete four hours of registry-specific continuing education per year which the Alabama Department of Public Health/Office of EMS and Trauma (ADPH/OEMS&T) will provide. Technical support must be available to assist with these training requirements.

### **Trauma Multidisciplinary Committee or Peer Review**

There may be a multidisciplinary/peer review committee chaired by the trauma medical director or designee, with representatives from surgery, emergency medicine, anesthesia, and hospital administration. The purpose of the committee is to improve trauma care, along with other medical care by reviewing all trauma deaths, complications, and sentinel events with objective identification of issues and appropriate responses. A monthly meeting should be held.

General surgery attendance at the committee/peer review meetings is essential. The general surgeon is the foundation of care in the trauma program. All general surgeons on the trauma call panel should attend meetings, if possible.

The trauma medical director must ensure and document dissemination of information and findings from the peer review meetings to the noncore surgeons on the trauma call panel.

The trauma multidisciplinary or peer-review committee may also serve other Quality Assurance/Quality Improvement (QA/QI) functions or be combined as a part of other QA/QI functions.

**Author:** John Campbell, M.D.

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 (Code of Ala. 1975, §22-11D-1, et seq.)

**History: New Rule:** Filed March 20, 2008; effective April 24, 2008. **Repealed and Replaced:** Filed February 18, 2009; effective March 25, 2009. **Amended:** Filed September 17, 2009; effective October 22, 2009. **Amended:** Filed September 21, 2011; effective October 26, 2011. **Amended:** Filed September 20, 2012; effective October 25, 2012. **Amended:** Filed March 20, 2014; effective April 24, 2014.

**420-2-2-AB**      Reserved.

**Author:**

**Statutory Authority:**

**History:**

**420-2-2-AC**      Reserved.

**Author:**

**Statutory Authority:**

**History:**

**420-2-2-AD**      Reserved.

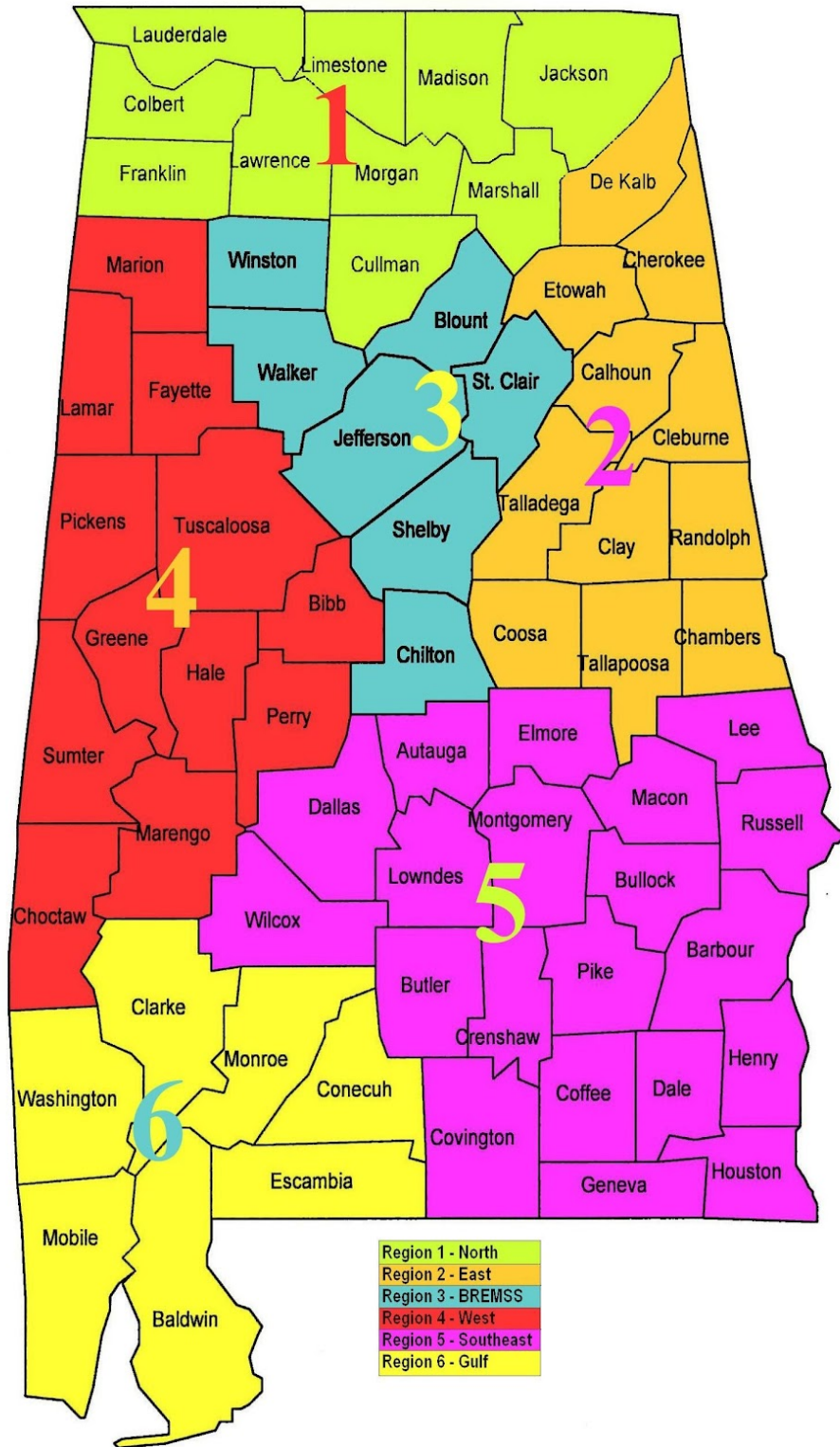
**Author:**

**Statutory Authority:**

**History:**

420-2-2-AE Appendix E EMS And Trauma Regions.

# EMS & Trauma Regions



**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed May 21, 2008, Effective June 25, 2008.

**Repealed and Replaced:** Filed February 18, 2009, Effective March 25, 2009. **Amended:** Filed March 20, 2014; effective April 24, 2014.

**420-2-2-AF Appendix F Patient Entry Criteria For Hospitals.****TRAUMA SYSTEM PATIENT ENTRY CRITERIA FOR HOSPITALS**

The following are criteria for in-hospital medical personnel to enter into the Alabama Trauma System a patient who has been involved in a trauma or burn incident.

**Physiological criteria present on arrival or develop during evaluation and observation:**

1. A systolic BP < 90 mm/Hg in an adult or child 6 years or older < 80 mm/Hg in a child less than 6 years old.
2. Respiratory distress rate < 10 or >29 in adults, or <20 or >60 in a newborn < 20 or > 40 in a child three years or younger <12 or >29 in a child four years or older.
3. Head trauma with Glasgow Coma Scale score of 13 or less or head trauma with any neurologic changes in a child five or younger. The level of trauma center to which this patient would be transferred would depend on regional secondary triage criteria. Generally only GCS scores of 9 or less are triaged to a Level I Trauma Hospital.

**Anatomical Criteria (patient with normal physiologic signs):**

1. The patient has a flail chest.
2. The patient has two or more obvious proximal long bone fractures (humerus, femur).
3. The patient has a penetrating injury of the head, neck, torso, or groin, associated with an energy transfer.
4. The patient has in the same body area a combination of trauma and burns (partial and full thickness) of 15% or greater.
5. The patient has an amputation proximal to the wrist or ankle.

6. The patient has one or more limbs which are paralyzed.
7. The patient has a pelvic fracture demonstrated by xray or other imaging technique.
8. Significant internal injuries are found during hospital evaluation and the referring hospital does not have the surgical resources to manage them.

**Mechanism of Injury Criteria (patient with normal physiologic signs) :**

This should not be used as criteria for entering a patient into the trauma system except by facilities that lack the resources and/or expertise to properly evaluate a patient for internal injuries. Patients put into the system for this reason could adequately be evaluated by a Level II or Level III trauma hospital.

1. A patient with the same method of restraint and in the same seating area as a dead victim.
2. Ejection of the patient from an enclosed vehicle.
3. Motorcycle/bicycle/ATV crash with the patient being thrown at least ten feet from the motorcycle/bicycle.
4. Auto versus pedestrian with significant impact with the patient thrown, or run over by a vehicle.
5. An unbroken fall of twenty feet or more onto a hard surface. Unbroken fall of 10 feet or 3 times the height of the child onto a hard surface.

**Burn Criteria:**

Indications for entering the patient into the trauma system and transferring to a burn center include the following:

1. Partial thickness burn of greater than 10% of the total body surface area.



2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
3. Thirddegree burns in any age group.
4. Electrical burns, including lightning injury.
5. Chemical burns.
6. Inhalation injury.
7. Burn injuries in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
8. Any patient with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient's condition may be stabilized initially in a trauma center before transfer to a burn center.
9. Burned children in hospitals without qualified personnel or equipment for the care of children.
10. Burn injury in patients who will require special social, emotional, or rehabilitative intervention.

## NOTES:

1. Patients entered into the system for Physiologic criteria may be transferred by calling the Alabama Trauma Communications Center (ATCC) 18003590123.
2. Patients entered into the trauma system for Burn criteria may be transferred by calling the ATCC for availability of appropriate bed (floor vs. ICU) at ready burn center. When availability of a bed is confirmed, the ATCC will connect the transferring physician with the receiving surgeon (if immediately available) at the ready burn center to discuss any stabilization that should be done prior to transfer.
3. Facilities wishing to enter a patient into the trauma system for Anatomic or Mechanism of Injury criteria should call the ATCC who can identify the appropriate ready hospital and can facilitate the transferring physician consulting with a receiving physician to discuss the transfer.

**Author:** John Campbell, M.D.

**Statutory Authority:** Code of Ala. 1975, §22-11D-1, et. seq., Alabama Legislature, Act 299, Regular Session, 2007.

**History: New Rule:** Filed December 17, 2008; effective January 21, 2009. **Amended:** Filed September 17, 2009; effective October 22, 2009. **Amended:** Filed March 20, 2014; effective April 24, 2014.

420-2-2-AG      Appendix G - Attachment to rule 420-2-2-.08.

Appendix G

POLICIES	EIGHTH EDITION JANUARY 2016
<b>Trauma System</b>	<b>1.16</b>

PURPOSE
To provide patient entry criteria and system guidance for the Alabama Trauma System.

GUIDELINE
<p><b>ALABAMA TRAUMA SYSTEM ENTRY CRITERIA</b></p> <p><b>Physiological Criteria:</b></p> <ol style="list-style-type: none"> <li>1. A systolic BP &lt;90 mm/Hg in an adult <b>or child 6 years or older &lt;80 mm/Hg in a child five or younger.</b> This includes any trauma related cardiac arrest that will be treated or transported to the hospital.</li> <li>2. Respiratory distress - rate &lt; 10 or &gt;29 in adults, <b>or &lt;20 or &gt;60 in a newborn. &lt;20 or &gt;40 in a child three years or younger. &lt;12 or &gt;29 in a child four years or older.</b></li> <li>3. Head trauma with Glasgow Coma Scale score of 13 or less <b>or head trauma with any neurologic changes in a child five years or younger.</b></li> </ol> <p><b>Anatomical Criteria:</b></p> <ol style="list-style-type: none"> <li>1. The patient has a flail chest.</li> <li>2. The patient has two or more obvious proximal long bone fractures (humerus, femur).</li> <li>3. The patient has penetrating trauma to the head, neck, torso, or extremities proximal to the elbow or knee.</li> <li>4. The patient has in the same body area a combination of trauma and burns (partial and full thickness) of fifteen percent or greater.</li> <li>5. See Burns Protocol (3.08) for criteria to enter a burned patient into the trauma system.</li> <li>6. The patient has an amputation proximal to the wrist or ankle.</li> <li>7. The patient has one or more limbs which are paralyzed.</li> <li>8. The patient has a pelvic fracture, as evidenced by a positive "pelvic movement" exam.</li> <li>9. The patient has a crushed, degloved, mangled, or pulseless extremity.</li> <li>10. The patient has an open or depressed skull fracture.</li> </ol> <p><b>Mechanism of the patient injury:</b></p> <ol style="list-style-type: none"> <li>1. A patient with the same method of restraint and in the same seating area as a dead victim.</li> <li>2. Ejection of the patient from an enclosed vehicle.</li> <li>3. Motorcycle/bicycle/ATV crash with the patient being thrown at least ten feet from the motorcycle/bicycle.</li> <li>4. Auto versus pedestrian with significant impact with the patient thrown, or run over by a vehicle.</li> <li>5. An unbroken fall of twenty feet or more onto a hard surface. <b>Unbroken fall of 10 feet or 3 times the height of the child onto a hard surface.</b></li> </ol>

Appendix G

POLICIES	EIGHTH EDITION JANUARY 2016
<b>Trauma System (continued)</b>	<b>1.16</b>

GUIDELINE
<p><b>ALABAMA TRAUMA SYSTEM ENTRY CRITERIA</b></p> <p><b>EMSP Discretion:</b></p> <ol style="list-style-type: none"> <li>1. If the EMSP is convinced that the patient could have a severe injury which is not yet obvious, the patient should be entered into the Alabama Trauma System.</li> <li>2. The EMT's suspicion of severity of trauma/injury may be raised by the following factors:                     <ol style="list-style-type: none"> <li>a. Age &gt;55</li> <li>b. <b>Age &lt;five</b></li> <li>c. Environment (hot/cold)</li> <li>d. Patient's previous medical history</li> <li>e. Insulin dependent diabetes or other metabolic disorder</li> <li>f. Bleeding disorder or currently taking anticoagulant medication (coumadin, heparin)</li> <li>g. COPD/Emphysema</li> <li>h. Renal failure on dialysis</li> <li>i. Pregnancy</li> <li>j. <b>Child with congenital disorder</b></li> <li>k. Extrication time &gt;20 minutes with heavy tools utilized</li> <li>l. Motorcycle crash</li> <li>m. Head trauma with history of more than momentary loss of consciousness.</li> </ol> </li> </ol> <p><b>ENTERING A PATIENT INTO THE ALABAMA TRAUMA SYSTEM</b></p> <p><b>EMS Providers should call the Alabama Trauma Communications Center (ATCC) to determine patient destination.</b></p> <p>ATCC contact numbers:                      Toll-Free Emergency: 1-800-359-0123, or                      Southern LINC EMS Fleet 55: Talkgroup 10/Private 55*380, or Nextel: 154*132431*4</p> <p>The initial unit on-scene should enter the patient into the Alabama Trauma System but if they have not done so, it becomes the responsibility of the transporting service (ground or air) before the receiving facility is selected.</p>

Appendix G

POLICIES	EIGHTH EDITION JANUARY 2016
<b>Trauma System (continued)</b>	<b>1.16</b>

GUIDELINE (continued)
<p><b>ENTERING A PATIENT INTO THE ALABAMA TRAUMA SYSTEM (continued)</b></p> <p>For helicopter EMS (HEMS) it is preferable to request a preliminary receiving facility from ATCC prior to arrival on the scene and then later enter the patient into the ATCC as soon as is logistically possible. After assessing a trauma situation and making the determination that the patient should be entered into the Alabama Trauma System, the EMSP licensed at the highest level should contact the ATCC at the earliest practical time before the receiving facility is selected and provide the following information. The highest level EMSP on the scene may delegate the call to ATCC to a lower level EMSP if patient care duties require the higher level EMSP's attention:</p> <ol style="list-style-type: none"> <li>1) EMSP service</li> <li>2) Location of Trauma Scene</li> <li>3) Age and Sex of the patient(s)</li> <li>4) Reason for Entry and Mechanism of Injury</li> <li>5) Patient assessment             <ol style="list-style-type: none"> <li>a) Airway Status</li> <li>b) Vital signs and GCS</li> <li>c) Areas of Injury</li> <li>d) Environmental issues or co-morbid factors</li> </ol> </li> <li>6) Transportation type</li> <li>7) Transportation timing</li> </ol> <p>ATCC will provide a unique identification number that must be entered into the e-PCR.</p> <p>Notify the ATCC of any change in the patient's condition. The receiving trauma center or ATCC should be updated by the transporting unit 5-10 minutes out. This update should only consist of any patient changes and patient's current condition. A repeat of information used to enter the patient into the Alabama Trauma System is not necessary since this information will be relayed by the ATCC to the receiving trauma center.</p> <p>After the patient is delivered to the trauma center, the transporting provider should call the ATCC with the Patient Care Report times.</p>

**Author:** Sarah Nafziger, M.D.; Choon Lang  
**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala, 1975, §22-11D-1, et. seq.).

**History:** **New Rule:** Filed February 18, 2009; effective March 25, 2009. **Amended:** Filed March 20, 2014; effective April 24, 2014. **Repealed and New Rule (Appendix G Replaced Appendix H):** Filed June 20, 2014; effective July 25, 2014.

420-2-2-AH      Appendix H Trauma System Protocol.

**Author:**

**Statutory Authority:**

**History:**

**420-2-2-AI Appendix I Guidelines For Early Activation Of Helicopter Emergency Medical Services.****Operations Guidelines**

June 25, 2008

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**GUIDELINES FOR EARLY ACTIVATION OF HELICOPTER EMERGENCY MEDICAL SERVICES**  
**7.9**

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**PURPOSE:** Helicopter EMS services (HEMS) offer speed of transport and ALS personnel experienced in managing critical patients. These guidelines are to assist EMS responders in determining when early activation of HEMS would likely be in the critical patient's best interest. Early Activation means initiation of a helicopter response prior to arrival of the EMS responders to the scene. Early Activation may be based on pre-arrival information regarding the incident or a suspicion by EMS that specialty care may be needed. Early Activation is initiated at the request of the first responding EMS providers or in conjunction with Dispatch and the EMS service. It is recognized that pre-arrival information may be misleading and the activated HEMS may be cancelled. The HEMS service that can respond to the scene in the shortest time should be called. If a HEMS service cannot answer a call and a second service is requested, the requesting agency must notify the second service that the call has already been refused and why.

Situations in which Early Activation of HEMS may be needed includes, but are not limited to:

1. Report of severe collision involving one or more vehicles
2. Multiple victim incidents with severe illness or injuries
3. Report of person being ejected from a vehicle
4. Pedestrian vs. vehicle with reported injuries
5. MVC with reported death and other injured persons
6. Report of severe burns
7. An unbroken fall of twenty feet or more onto a hard surface
8. Penetrating injury to head, neck, torso, or groin
9. Report of injury with paralysis
10. Sickness with new onset focal weakness or paralysis (suspected stroke)
11. Severe chest pain thought to be of cardiac etiology
12. Near drowning
13. Report of amputation proximal to wrist or ankle
14. Report of serious injury in a patient whose location would be difficult to access by ground ambulance but is more accessible by helicopter
15. Severe shortness of breath or airway problems
16. There is no available ground ambulance to respond
17. Report of patient with symptoms of shock
18. Report of patient with history of trauma and altered mental status
19. Discretion of Medical Direction or responding EMS personnel

HEMS are most appropriately used when their use would **SIGNIFICANTLY** reduce the time required to get the patient to the appropriate hospital or when potentially lifesaving prehospital interventions may be needed that that cannot be provided by the responding EMS service. The Regional Aeromedical Plan must be followed when approved. Quality Improvement monitoring is important and is best done in partnership with the responding helicopter service.

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed February 18, 2009; effective March 25, 2009. **Amended:** Filed March 20, 2014; effective April 24, 2014.



420-2-2-AJ Appendix J Guidelines For Helicopter Transport Of Trauma System Patients.

Operations Guidelines

June 25, 2008

**GUIDELINES FOR HELICOPTER TRANSPORT  
OF TRAUMA SYSTEM PATIENTS**

7.10

**Purpose**

Helicopter EMS services (HEMS) offer speed of transport and ALS personnel experienced in managing critical patients. The purpose of this Air Evacuation Protocol is to provide EMS personnel who are on scene, with guidelines for utilizing HEMS for transporting trauma system patients.

**Process**

Several factors must be considered before summoning HEMS for a trauma scene response. Stable patients who are accessible by ground vehicles and are within a reasonable distance from the designated trauma center are best transported by ground vehicles. Often, patients can be transported by ground ambulance and delivered to the appropriate trauma center before a helicopter can reach the scene. You must follow your Regional Aeromedical Plan when approved. If a question exists as to whether HEMS transport would be appropriate, Medical Direction should be consulted before summoning a helicopter for a scene response. HEMS are best used to transport critical trauma patients such as those entered into the trauma system because of physiologic or anatomic criteria. Those patients entered into the trauma system because of mechanism of injury or EMT discretion criteria are often more appropriately transported by ground ambulance.

**The primary determinant should be to get the patient to the most appropriate facility in the shortest amount of time.**

Emergency Medical Services personnel should request HEMS when transportation by air will SIGNIFICANTLY reduce actual transport time to the receiving facility and/or the patient needs potentially lifesaving prehospital interventions that cannot be provided by the responding EMS service. The following are some criteria when HEMS transport should be considered.

1. Transport time to the designated trauma center by ground ambulance is significantly greater than the response time and transport to the designated Trauma Center by air.
2. Ambulance access to the scene or away from the scene is significantly impeded by road conditions and/or traffic.
3. Prolonged patient extrication when a Level I facility is needed. Understand that some extricated patients are not

injured and/or have sustained minor injuries and may not need HEMS.

4. Multi-system blunt or penetrating trauma with unstable vital signs.
5. Severe burns that require transport to a burn center (See Protocol 4.7).
6. Patients with severe respiratory distress or airway problems.
7. Multiple patient incidents that exceed ground ambulance service resources.
8. No ambulance available to transport the patient and/or no ALS service (if needed) within 30 minutes.
9. Discretion of Medical Direction or the on-scene EMS personnel.

When use of HEMS is not specifically defined by the protocol, the on-scene EMS personnel can establish communication with Medical Direction for advice.

Once the decision is made to use HEMS for a trauma patient, the service that can respond to the scene in the shortest time should be called. Because helicopters must go through a preflight protocol before lift-off, the shortest response time should be obtained by calling the HEMS first and then calling the TCC to decide on the proper destination hospital. When a decision is made on a destination hospital, the helicopter service should be immediately notified so they may develop their flight plan. If Early Activation was utilized, the responding HEMS service should be notified of the patient destination as soon as possible. If a HEMS service is unable to answer a call and a second service is requested, the requesting agency must notify the second service that the call has already been refused and why.

An EMS service should not wait on the scene or unduly delay transport waiting for HEMS to arrive. If the patient is packaged and ready for transport, the EMS service should reassign the landing zone to a mutually agreeable site that is closer to the hospital, and should initiate transport. The helicopter may intercept an ambulance at an agreed upon alternate landing site.

### **Cancellation**

When EMS personnel arrive on scene, they should assess the situation. If HEMS has already been called and it is the professional judgment of the HIGHEST LEVEL LICENSED EMS PERSONNEL ON THE SCENE that the helicopter will not provide a significant benefit, it should be cancelled as soon as possible. A HEMS request by a BLS agency may be cancelled by the responding ALS agency only after an appropriate patient assessment has been conducted. A HEMS request by an ALS agency may be cancelled only

by the agency making the initial request. If HEMS cancels a flight, they must inform the requesting agency ASAP.

If HEMS arrives on scene and determines that the patient does not meet criteria for helicopter transport or that patient, weather, or aircraft issues preclude use of the helicopter for transport, they may request ground transport of that patient. The request for ground transport does not preclude the HEMS crew from boarding the ground ambulance and continuing to provide advanced care as would be provided in flight. In situations where the HEMS crew determines that the patient does not have a medical need for HEMS transport, the transfer of this patient to a ground ambulance shall not constitute abandonment as defined by EMS regulations.

#### **Quality Assurance/Improvement**

As with all EMS responses in which HEMS is utilized, there should be QA/QI done in partnership with the responding helicopter service. Follow the Regional Aeromedical Plan when approved.

**THIS IS A GUIDELINE AND IS NOT ALL INCLUSIVE. EMS PERSONNEL SHOULD USE GOOD CLINICAL JUDGMENT AT ALL TIMES. IF THERE ARE ANY QUESTIONS, OLMD SHOULD BE CONSULTED.**

**Author:** John Campbell, M.D., and Choona Lang

**Statutory Authority:** Alabama Legislature, Act 299, Regular Session, 2007 Code of Ala. 1975, §22-11D-1, et. seq.

**History: New Rule:** Filed February 18, 2009; effective March 25, 2009. **Amended:** Filed March 20, 2014; effective April 24, 2014.