

APPENDIX A Trauma Center Criteria

Alabama Trauma Center Designation

Trauma Center 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
INSTITUTIONAL ORGANIZATION			
Trauma Program <i>(Attached)</i>	E	E	E
Trauma Service <i>(Attached)</i>	E	E	-
Trauma Team <i>(Attached)</i>	E	E	E
Trauma Program Medical Director <i>(Attached)</i>	E	E	D
Trauma Multidisciplinary Committee <i>(Attached)</i>	E	E	D
Trauma Coordinator/ TPM <i>(Attached)</i>	E	E	E
HOSPITAL DEPARTMENTS/ DIVISIONS/ SECTIONS			
Surgery	E	E	E
Neurological Surgery	E	D	D
Orthopedic Surgery	E	E	D
Emergency Medicine	E	E	E
Anesthesia ³	E	E	E
Pediatrics	E	D	-
CLINICAL CAPABILITIES			
Published on-call schedule	E	E	E
General Surgery (attending surgeon promptly available ¹ to maintain green status)	E	E	E
Published back-up schedule or written back-up method ²	E	D	D
Dedicated to single hospital when on-call	E	D	D
Anesthesia (promptly available ³ to maintain green status)	E	E	E
Emergency Medicine (immediately available in-house 24 hours a day)	E	E	E
On-call 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	-
Dedicated to one hospital or back-up call	E	D	-
Obstetrics/gynecologic surgery ⁴	E	D	-
Ophthalmic surgery	E	D	-
Oral/maxillofacial surgery	E	D	-
Orthopedic	E	E	D
Pediatric Surgery	E	D	-

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Dedicated to one hospital or back-up call	E	D	-
Plastic surgery	E	D	D
Critical care medicine-*to include neonatal/pediatric ICU	E	D	-
Pediatrics	E	E	D
Radiology	E	E	E
Pediatric Radiology	D	D	-
Thoracic surgery	E	D	-
CLINICAL QUALIFICATIONS			
General/trauma surgeon			
Current board certification or eligible	E	E	E
Average of 6 hours of trauma related CME/year ⁵	E	E	D
ATLS completion	E	E	E
Trauma Multidisciplinary Committee Attendance /Peer Review Committee Attendance > 50%	E	E	E
Emergency Medicine			
Board certification ⁶ or eligible	E	D	D
ATLS completion ⁷	E	E	E
Average of 6 hours of trauma related CME/year ⁵	E	E	E
Trauma Multidisciplinary Committee Attendance /Peer Review Committee Attendance > 50%	E	E	-
Neurosurgery			
Current board certification or eligible	E	D	D
Average of 6 hours of trauma related CME/year ⁵	E	D	D
ATLS completion	D	D	D
Trauma Multidisciplinary Committee Attendance/ Peer Review Committee Attendance > 50%	E	D	D
Orthopedic surgery			
Board certification or eligible	E	D	D
Average of 6 hours of trauma related CME/year ⁵	E	E	D
ATLS Completion	D	D	D
Trauma Multidisciplinary Committee Attendance/ Peer Review Committee Attendance > 50%	E	D	D
FACILITIES/ RESOURCES/ CAPABILITIES			
Volume Performance			
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

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Presence of surgeon at operative procedures	E	E	E
Emergency Department (ED)			
Personnel - designated physician director	E	E	E
Equipment for resuscitation for patients of all ages			
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
Electrocardiograph-oscilloscope-defibrillator 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
Large-bore intravenous catheters	E	E	E
Sterile surgical sets for:			
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 pressure monitors	E	D	D
Ultrasound	E	E	D
Drugs necessary for emergency care	E	E	E
X-ray available to maintain green status ¹¹	E	E	D
Cervical traction devices	E	E	D
Length based Pediatric Resuscitation tape	E	E	E
Rapid infuser system	E	E	D
Qualitative end-tidal CO ₂ determination	E	E	E
Communications with EMS vehicles	E	E	E
OPERATING ROOM			
Immediately available to maintain green status ⁸	E	D	D
Operating Room Personnel			
In-house to maintain green status ⁸	E	-	-

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Available to maintain green status	-	E	E
Age Specific Equipment			
Cardiopulmonary bypass	E	-	-
Operating microscope	D	D	-
Thermal Control Equipment			
For patient	E	E	E
For fluids and blood	E	E	E
X-ray capability, including c-arm 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
Post Anesthetic Recovery Room (SICU is acceptable)			
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
Intensive or Critical Care Unit for Injured Patients			
Registered nurses with trauma education ¹³	E	E	-
Designated surgical director or surgical co-director ¹²	E	D	D
Surgical ICU service physician in-house 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	-
Respiratory Therapy Services			
Available in-house to maintain green status	E	E	D
On-call to maintain green status	-	-	D
Radiological services			
In-house radiology technologist to maintain green status	E	E	D
Angiography	E	D	-
Sonography	E	E	D
Computer Tomography (CT) prom	E	E	D
In-house CT technician	E	-	-

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Magnetic Resonance Imaging (Technician not required in-house)	E	D	-
Clinical laboratory services (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 cross-matching	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
Acute Hemodialysis			
In-house (staff not required in-house for green status)	E	-	-
Burn Care – Organized			
In-house	D	-	-
Acute Spinal Cord Management			
In-house	E	D	-
REHABILITATION SERVICES			
Physical Therapy	E	E	D
Occupational Therapy	E	D	D
Speech Therapy	E	D	-
Social Service	E	E	D
PERFORMANCE IMPROVEMENT			
Performance improvement programs ¹⁴	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 conference-multidisciplinary	E	E	D
Medical nursing audit	E	E	E
Review of pre-hospital trauma care ⁹	E	E	E
Review of times and reasons for trauma status being red	E	E	E
Review of times and reasons for transfer of injured patients	E	E	E
Performance improvement personnel assigned to review care of injured patients	E	D	D
CONTINUING EDUCATION/OUTREACH			
General Surgery residency program	D	-	-

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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 pre-hospital personnel ¹⁰	E	E	E
PREVENTION			
Collaboration with other institutions for injury control and prevention	E	D	D
Designated prevention coordinator-spokesman 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
RESEARCH			
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	-	-

- not applicable

¹In 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.

²If 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.

³Anesthesiologist 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, anesthesiology 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).

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⁴Alabama 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.

⁵An average of 18 hours of trauma CME every three years is acceptable. An average of three of the 18 hours should focus on pediatrics.

⁶Physicians 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 centers may have an affiliation with pediatric hospitals to fulfill added pediatric requirements.

⁷Physicians 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.

⁸An 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.

⁹All 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).

¹⁰Hospital must complete and return to the RAC 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.

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

¹²Level 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.

¹³Some portion of education should be pediatrics based.

¹⁴Includes adults and pediatrics.