Title 19 - DEPARTMENT OF HEALTH AND SENIOR SERVICES
Division 30 – Division of Regulation and Licensure
Chapter 40 – Comprehensive Emergency Medical Services Systems Regulations
(October 27, 2009)

PROPOSED RULE

19 CSR 30-40.450 Standards for Level IV Trauma Center Designation.

PURPOSE: This rule establishes standards for level IV trauma center designation.

EDITOR'S NOTE: IV-R after a standard indicates a requirement for a level IV trauma center. IV-IH after a standard indicates an in-house requirement for a level IV trauma center. IV-IA indicates an immediately available requirement for level IV trauma centers. IV-PA indicates a promptly available requirement for level IV trauma centers.

PUBLISHER'S NOTE: The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. This material as incorporated by reference in this rule shall be maintained by the agency at its headquarters and shall be made available to the public for inspection and copying at no more than the actual cost of reproduction. This note applies only to the reference material. The entire text of the rule is printed here.

(1) General Standards for Trauma Center Designation.

(A) The hospital board of directors, administration, medical staff and nursing staff shall demonstrate a commitment to quality trauma care. Methods of demonstrating the commitment shall include, but not be limited to, a board resolution that the hospital governing body agrees to establish policy and procedures for the maintenance of services essential for a trauma center; assure that all trauma patients will receive medical care at the level of the hospital's designation; commit the institution's financial, human and physical resources as needed for the trauma program; and establish a priority admission for the trauma patient to the full services of the institution. (IV-R)

(B) Trauma centers shall agree to accept all trauma victims appropriate for the level of care provided at the hospital, regardless of race, sex, creed or ability to pay. (IV-R)

(C) Trauma centers shall identify, stabilize according to its capability and patient condition, and facilitate rapid transfer of the severely injured trauma patient to a higher level of care. Situations in which the severely injured trauma patient might be taken to a Level IV center (other than self-transport or walk-ins) include, but are not limited to, immediate life threatening situations such as cardiac or respiratory arrest per EMS protocol. For the non-severely injured trauma patient, the Level IV center shall evaluate and transfer to higher level trauma center per protocol~~as needed~~.

(D) The hospital shall demonstrate evidence of a trauma program that provides the trauma team with appropriate experience to maintain skill and proficiency in the care of trauma patients. Such evidence shall include meeting of continuing education unit requirements by all professional staff, documented regular attendance by all trauma care providers at trauma program performance improvement and patient safety program meetings, documentation of continued experience as defined by the trauma medical director in management of sufficient numbers of severely injured patients to maintain skill levels, and outcome data on quality of patient care as defined by regional emergency medical service committees. Regular attendance shall be defined by each trauma service, but shall be not less than fifty percent (50%) of all meetings. The trauma medical director must ensure and document dissemination of information and findings from the peer review meetings to the trauma care providers on the emergency department trauma call roster. (IV-R)

(E) There shall be a lighted designated helicopter landing area –to accommodate incoming medical helicopters. (IV-R)

1. The landing area shall serve as the receiving and take-off area for medical helicopters and shall be cordoned off from the general public when in use to assure its continual availability and safe operation. (IV-R)

2. It is recommended that the landing area shall be no more than three (3) minutes from the emergency department. (IV-R)

(F) The hospital shall appoint a board-certified or board-admissible physician to serve as the trauma medical director. (IV-R)

1. There shall be a job description and organization chart depicting the relationship between the trauma medical director and other services. (IV-R)

2. The trauma medical director shall be a member of the emergency department trauma call roster. (IV-R)

3. The trauma medical director shall be responsible for the oversight of the education and training of the medical and nursing staff in trauma care. (IV-R)

4. The trauma medical director shall document a minimum average of sixteen (16) hours of continuing medical education (CME) in trauma care every year. (IV-R)

(G) The trauma program manager shall be a registered nurse or other qualified individual. (IV-R)

1. There shall be a job description and organization chart depicting the relationship between the trauma nurse coordinator/trauma program manager and other services. (IV-R)

2. The trauma nurse coordinator/trauma program manager shall document a minimum average of eight (8) hours of continuing -education in trauma care every year. (IV-R)

(H) By the time of the initial review, all members of the licensed trauma care provider emergency department trauma call roster shall have successfully completed or be registered for a provider Advanced Trauma Life Support (ATLS) course or an Advanced Trauma Care for Nurses (ATCN) course. Each licensed trauma care provider on the emergency department trauma call roster shall maintain current certification in either ATLS or ATCN, except for physicians who are board-certified in emergency medicine. (IV-R) ATLS is incorporated by reference in this rule as published by the American College of Surgeons in 2003 and is available at American College of Surgeons, 633 N. St. Clair St., Chicago, IL 60611. This rule does not incorporate any subsequent amendments or additions. ATCN is incorporated by reference in this rule as published in 2003 by the Society of Trauma Nurses and is available at the Society of Trauma Nurses, 1926 Waukegan Road, Suite 100, Glenview, Illinois 60025. This rule does not incorporate any subsequent amendments or additions. **Update reference** (IV-R)

(I) All members of the emergency department trauma call roster shall document a minimum average of eight (8) hours of continuing education in trauma care every year. Four (4) of the eight (8) hours of education per year must be applicable to pediatric trauma. (IV-R)

(J) The hospital shall demonstrate that there is a plan for adequate post-discharge follow-up on trauma patients. (IV-R)

(K) A Missouri trauma registry shall be completed on each patient who sustains a traumatic injury and meets the following criteria: Includes at least one (1) code within the range of the following injury diagnostic codes as defined in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9)-(CM) 800-959.9 which is incorporated by reference in this rule as published by the Centers for Disease Control and Prevention in 2006 and is available at National Center for Health Statistics, 1600 Clifton Road, Atlanta, GA 30333.update reference This rule does not incorporate any subsequent amendments or additions. Excludes all diagnostic codes within the following code ranges: 905–909.9 (late effects of injury), 910–924.9 (superficial injuries, including blisters, contusions, abrasions, and insect bites), 930–939.9 (foreign bodies), and must include one of the following criteria: hospital admission, patient transfer out of facility, or death resulting from the traumatic injury (independent of hospital admission or hospital transfer status). The registry shall be submitted electronically in a format defined by the Department of Health and Senior Services. Electronic data shall be submitted quarterly, ninety (90) days after the quarter ends. The trauma registry must be current and complete. A patient log with admission date, patient name, and injuries must be available for use during the site review process. Information provided by hospitals on the trauma registry shall be subject to the same confidentiality requirements and procedures contained in section 192.067, RSMo. The trauma care data elements shall be those identified and defined by the National Trauma Data Standard which is incorporated by reference in this rule as published by the American College of Surgeons in 2008 and is available at the American College of Surgeons, 633 N. St. Clair St., Chicago, IL 60611. This rule does not incorporate any subsequent amendments or additions. (IV-R)

(L) The hospital shall have a trauma team activation protocol that establishes the criteria used to rank trauma patients according to the severity and type of injury and identifies the persons authorized to notify trauma team members when a severely injured patient is en route or has arrived at the trauma center. (IV-R)

1. The trauma team activation protocol shall provide for immediate notification and response requirements for trauma team members when a severely injured patient is en route to the trauma center. (IV-R)

(M) The hospital shall have a plan to notify an organ or tissue procurement organization and cooperate in the procurement of anatomical gifts in accordance with the provisions in section 194.233, RSMo. (IV-R)

(N) A level IV trauma center shall be either a currently designated critical access hospital or be located in rural places of the state. (IV-R)

(O) The hospital shall have a written transfer agreement and an expedited transfer process to a higher level of care for the severely injured patient.

(2) Medical Staffing Standards for Trauma Center Designation.

(A) There shall be a delineation of privileges for the trauma service staff made by the medical staff credentialing committee. (IV-R)

(B) All members of the emergency department trauma call roster shall comply with the availability and response requirements of this rule. If not on the hospital premises, trauma team members who are immediately available shall carry electronic communication devices at all times to permit contact by the hospital and shall respond immediately to a contact by the hospital. (IV-R IA)

(C) The level IV center shall have a mechanism for adequate pre-notification of the physician on-call for trauma coverage such that the physician on-call for trauma shall be present in the ED when the patient arrives.

(D) The level IV trauma center shall have someone available in the ED 24 (twenty-four) hours a day 7 (seven) days a week who can establish and manage an airway and manage respiratory and circulatory compromise.~~All trauma care providers shall be able to establish and manage an airway and manage respiratory and circulatory compromise, including but not limited to performing needle decompression of the chest.~~

1. All trauma care providers shall be able to establish and manage an airway and manage respiratory and circulatory compromise.~~ The level IV trauma center shall have someone available in the ED 24 (twenty-four) hours a day 7 (seven) days a week who can establish and manage an airway and manage respiratory and circulatory compromise, including but not limited to performing needle decompression of the chest,.~~

(3) Standards for Hospital Resources and Capabilities for Trauma Center Designation.

(A) The hospital shall meet emergency department standards for trauma center designation.

1. The emergency department staffing shall ensure immediate and appropriate care of the trauma patient. (IV-R)

A. The physician director of the emergency department shall be a board-certified or board-admissable physician. (IV-R)

B. There shall be a physician trained in the care of the critically injured as evidenced by credentialing in ATLS and current in trauma CME as previously defined in the emergency department. ATLS is incorporated by reference in this rule as published by the American College of Surgeons in 2003 and is available at American College of Surgeons, 633 N. St. Clair St., Chicago, IL 60611. This rule does not incorporate any subsequent amendments or additions update reference. (IV-RIA)

C. All emergency department trauma care providers shall successfully complete the ATLS or ATCN courses. All nurses functioning as trauma care providers shall maintain current ATCN certification. Physicians, who are certified by boards other than emergency medicine and treat trauma patients in the emergency department, are required to complete the ATLS course and maintain current ATLS certification. (IV-R)

D. There shall be written policies defining the relationship of the emergency department physicians to other ~~physician~~ members of the trauma team. (IV-R)

E. All registered nurses assigned to the emergency department shall be credentialed in trauma nursing by the hospital within one (1) year of assignment. (IV-R)

(I) Registered nurses competent in trauma nursing shall document a minimum of eight (8) hours of trauma-related continuing nursing education per year. (IV-R)

(II) Registered nurses competent in trauma care shall obtain~~maintain~~ current provider status in the Trauma Nurse Core Curriculum or Advanced Trauma Care for Nurses and either Pediatric Advanced Life Support (PALS), Advanced Pediatric Life Support (APLS), or Emergency Nursing Pediatric Course (ENPC) within one (1) year of employment in the emergency department and maintain thereafter. The Trauma Nurse Core Curriculum is incorporated by reference in this rule as published in 2007 by the Emergency Nurses Association and is available at the Emergency Nurses Association, 915 Lee Street, Des Plaines, IL 60016-9659. This rule does not incorporate any subsequent amendments or additions. Advanced Trauma Care for Nurses is incorporated by reference in this rule as published in 2003 by the Society of Trauma Nurses and is available at the Society of Trauma Nurses, 1926 Waukegan Road, Suite 100, Glenview, IL 60025. This rule does not incorporate any subsequent amendments or additions. Pediatric Advanced Life Support is incorporated by reference in this rule as published in 2005 by the American Heart Association and is available at the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231. This rule does not incorporate any subsequent amendments or additions. Advanced Pediatric Life Support is incorporated by reference in this rule as published in 2007 by the American Academy of Pediatrics and the American College of Emergency Physicians and is available at the American Academy of Pediatrics, 141 Northwest Point Boulevard, Post Office Box 927, Elk Grove Village, Illinois 60009-0927 or the American College of Emergency Physicians, 1125 Executive Circle, Post Office Box 619911, Dallas, Texas 75261-9911 or Jones and Bartlett Publishers, 40 Tall Pine Drive, Sudbury, Massachusetts 01776. This rule does not incorporate any subsequent amendments or additions. The Emergency Nursing Pediatric Course is incorporated by reference in this rule as published by the Emergency Nurses Association in 2004 and is available at the Emergency Nurses Association, 915 Lee Street, Des Plaines, IL 60016-9659. This rule does not incorporate any subsequent amendments or additions. (IV-R) (verify most up-to-date reference)

2. Equipment for resuscitation and life support with age appropriate sizes for the critically or seriously injured shall include the following:

A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, sources of oxygen, and mechanical ventilator—(IV-R);

B. Suction devices—(IV-R);

C. Electrocardiograph, cardiac monitor, and defibrillator—(IV-R);

D. Central line insertion equipment—(IV-R);

E. All standard intravenous fluids and administration devices including intravenous catheters—(IV-R);

F. Sterile surgical sets for procedures standard for the emergency department—(IV-R);

G. Gastric lavage equipment—(IV-R);

H. Drugs and supplies necessary for emergency care—(IV-R);

I. Two-way communication link with emergency medical service (EMS) vehicles—(IV-R);

J. End-tidal carbon dioxide monitor—(IV-R);

K. Temperature control devices for patient and resuscitation fluids~~, parenteral fluids, and blood~~—(IV-R);

L. Rapid infusion system for parenteral infusion—(IV-R); and

M. Immobilization equipment including C-collars. (IV-R)

3. There shall be documentation that all equipment is checked according to the hospital preventive maintenance schedule. (IV-R)

4. There shall be a designated trauma resuscitation area in the emergency department. (IV-R)

5. There shall be X-ray capability with twenty-four (24)-hour coverage by technicians. (IV-R; IV-IA)

A. Resources shall include:

(I) Resuscitation equipment available to the radiology department (IV-R);

(II) Adequate physician and nursing personnel present with monitoring equipment to fully support the trauma patient and provide documentation of care during the time the patient is physically present in the radiology department and during transportation to and from the radiology department; and (IV-R)

(III) The hospital shall have a mechanism for timely interpretation of radiology exams to aid in patient management. (IV-R; IV-PA)

6. Nursing documentation for the trauma patient shall be on a trauma flow sheet approved by the trauma medical director and trauma nurse coordinator/trauma program manager. (IV-R)

(B) The hospital shall have written transfer agreements to higher levels of care for all injured patient. (IV-R)

(C~~B~~) The hospital shall have a written transfer agreement for patients requiring acute hemodialysis ~~capability or a written transfer agreement~~. (IV-R)

(D~~C~~) The hospital shall have a written transfer agreement for burn patients. (IV-R)

(E~~D~~) The hospital shall have a written transfer agreement for injury rehabilitation and spinal cord injury rehabilitation ~~capability or a written transfer agreement~~. (IV-R)

(F~~E~~) The hospital shall have written transfer agreement for~~possess~~ pediatric trauma management ~~capability or maintain written transfer agreements~~. (IV-R)

~~-~~(G~~F~~) There shall be documentation of adequate support services in assisting the patient's family from the time of entry into the facility to the time of discharge. (IV-R)

~~-~~(H~~G~~) The following clinical laboratory services shall be available twenty-four (24) hours a day:

1. Standard analyses of blood, urine and other body fluids; (IV-R)

~~2. Blood typing and cross-matching; (IV-R)~~

3. Coagulation studies; (IV-R)

4. ~~Comprehensive~~ B~~b~~lood bank or access to a community central blood bank and adequate hospital blood storage facilities; (IV-R)

5. Blood gases and pH determinations; (IV-R)

~~6. Serum and urine osmolality; (IV-R)~~

7. Drug and alcohol screening; and (IV-R)

8. A written protocol that the trauma patient receives priority. (IV-R)

(4) Standards for Hospital Performance Improvement, Patient Safety, Outreach, Public Education, and Training Programs for Trauma Center Designation.

(A) There shall be an ongoing performance improvement and patient safety program designed to objectively and systematically monitor, review, and evaluate the quality and appropriateness of patient care, pursue opportunities to improve patient care, and resolve identified problems. (IV-R)

(B) The following additional performance improvement and patient safety measures shall be required:

1. Regular reviews of all trauma-related deaths—(IV- R);

2. A regular morbidity and mortality review, at least quarterly—(IV-R);

3. A regular multidisciplinary trauma conference that includes representation of all members of the trauma team, with minutes of the conferences to include attendance and findings—(IV-R);

4. Regular reviews of the reports generated by the Department from the Missouri trauma registry and the head and spinal cord injury registry—(IV-R);

5. Regular reviews of pre-hospital trauma care including inter-facility transfers ~~and~~

6. A~~a~~ll pediatric and adult patients who meet the severely injured patient criteria ~~patients~~ seen in level IV~~adult~~ centers—(IV-R);

7. All patients with an ISS > 15 (fifteen) who are not transferred to a higher level of care (IV-R);

8~~6~~. Participation in reviews of regional systems of trauma care as established by the Department— (IV-R); and

9~~7~~. Trauma patients remaining greater than sixty (60) minutes prior to transfer will be reviewed as a part of the performance improvement and patient safety program. (IV-R)

(C) The hospital shall be actively involved in local and regional emergency medical services systems by providing training and clinical resources. (IV-R)

(D) The receiving hospital shall provide and monitor timely feedback to the EMS providers ~~and referring hospital, if involved~~. This feedback shall include, but not be limited to, diagnosis, treatment and disposition. It is recommended that the feedback be provided within seventy-two (72) hours of admission or~~to vs.~~ arrival at the hospital if not admitted and to the referring hospital if involved. (I-R, II-R, III-R, IV-R). When EMS does not provide patient care data on patient arrival or in a timely fashion (recommended within 3 hours of patient delivery), this paragraph does not apply.

(E) There shall be a hospital-approved procedure for credentialing nurses in trauma care. (IV-R)

1. All nurses providing care to severely injured patients and assigned to the emergency department ~~–~~shall complete the~~a~~ minimum ~~of sixteen (16) hours of~~ trauma nursing courses described in section 3A1EII to become credentialed in trauma care within one (1) year of assignment and maintain 8 (eight) hours trauma continuing education per year thereafter. (IV-R)

2. The content and format of any trauma nursing courses developed and offered by a hospital in place of the courses listed in section 3A1EII shall be developed in cooperation with the trauma medical director. This course must provide 16 (sixteen) hours of CEU's. A copy of the course curriculum used shall be filed with the Department. (IV-R)

3. Trauma nursing courses offered by ~~institutions of higher education in Missouri or other~~ level I and II centers~~–~~ or courses such as the Advanced Trauma Care for Nurses, Emergency Nursing Pediatric Course, or the Trauma Nurse Core Curriculum may be used to fulfill this requirement. To receive credit for this course, a nurse shall obtain advance approval for the course from the trauma medical director and trauma nurse coordinator/trauma program manager and shall present evidence of satisfactory completion of the course. (IV-R)

(F) Hospitals shall maintain a hospital trauma diversion protocol in order to allow best resource management within a given EMS region. Hospital diversion information must be maintained to include date, length of time, and reason for diversion. This must be monitored as a part of the Performance Improvement and Patient Safety program, and available when the hospital is site reviewed. (IV-R)

(G) Each trauma center shall have a disaster plan. A copy of this disaster plan must be maintained within the trauma center policies and procedures and should document the trauma services role in planning and response. (IV-R)

(5) Standards for the Programs in Trauma Research for Trauma Center Designation.

(A) The hospital shall agree to cooperate and participate with the Department in conducting epidemiological studies and individual case studies for the purpose of developing injury control and prevention programs. (IV-R)

*AUTHORITY: section 190.185, RSMo Supp. 200[7]***8** *and section 190.241, HB 1790, 94th General Assembly, Second Regular Session, 2008.* Emergency rule filed Aug. 28, 1998, effective Sept. 7, 1998, expired March 5, 1999. Original rule filed Sept. 1, 1998, effective Feb. 28, 1999. Amended: Filed Jan. 16, 2007, effective Aug. 30, 2007. Amended: Filed May 19, 2008, effective Jan. 30, 2009.*

**Original authority: 190.185, RSMo 1973, amended 1989, 1993, 1995, 1998, 2002 and 190.241, RSMo 1987, amended 1998, 2008.*

PUBLIC COST: This proposed amendment will cost state agencies or political subdivisions put in number in the aggregate.

PRIVATE COST: This proposed amendment will cost private entities put in number in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Teresa Generous, Director, Department of Health and Senior Services, Division of Regulation and Licensure, PO Box 570, Jefferson

City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the Missouri Register. No public hearing is scheduled.

Title 19 - DEPARTMENT OF HEALTH AND SENIOR SERVICES
Division 30 - Division of Regulation and Licensure
Chapter 40 – Comprehensive Emergency Medical Services Systems Regulations

PROPOSED AMENDMENT
September 16, 2009 (Final Draft)

19 CSR 30-40.410 Trauma Center Definitions~~signation Requirements~~. The department is amending section (1).

PURPOSE: This amendment defines Level IV trauma centers.

(1) The following definitions and abbreviations shall be used in the interpretation of the rules in 19 CSR 30-40.400 to 19 CSR 30-40.450:

(A) Advanced cardiac life support (ACLS) certified means that an individual has successfully completed a course of training in advanced cardiac life-support techniques certified by the American Heart Association and that certification is maintained;

(B) Anesthesiologist assistant (AA) means a person who meets each of the following conditions:

1. Has graduated from an anesthesiologist assistant program accredited by the American Medical Association's Committee on Allied Health Education and Accreditation or by its successor agency;

2. Has passed the certifying examination administered by the National Commission on Certification of Anesthesiologist Assistants;

3. Has active certification by the National Commission on Certification of Anesthesiologist Assistants;

4. Is currently licensed as an anesthesiologist assistant in the state of Missouri; and

5. Provides health care services delegated by a licensed anesthesiologist. For the purposes of subsection (1)(B), the licensed anesthesiologist shall be "immediately available" as this term is defined in section 334.400, RSMo.

(C) APLS course means

(D) ATCN course means

(E) ATLS course means the advanced trauma life support course approved by the American College of Surgeons when required, certification shall be maintained;

(F) Board-admissible means that a physician has applied to a specialty board and has received a ruling that s/he has fulfilled the requirements to take the examinations. Board certification must be obtained within five (5) years of the first appointment;

(G) Board-certified means that a physician has fulfilled all requirements, has satisfactorily completed the written and oral examinations, and has been awarded a board diploma in a specialty field;

(H) Certified registered nurse anesthetist (CRNA) means a registered nurse who has graduated from a school of nurse anesthesia accredited by the Council on Accreditation of Educational Programs of Nurse Anesthesia or its predecessor and who has been certified as a nurse anesthetist by the Council on Certification of Nurse Anesthetists;

(I) CME means continuing medical education and refers to the highest level of continuing education approved by the Missouri State Medical Association, the Missouri Association of Osteopathic Physicians and Surgeons, The American Osteopathic Association, or the Accreditation Council for Continuing Medical Education;

(J) Continuing nursing education means education approved or recognized by a national and/or state professional organization and/or trauma medical director;

(K) Credentialed or credentialing is a hospital-specific system of documenting and recognizing the qualifications of medical staff and nurses and authorizing the performance of certain procedures and establishing clinical privileges in the hospital setting;

(L) Department is the department of health and senior services in the state of Missouri;

(M) Director is the director of the department of health and senior services or the director's duly authorized representative;

(N) Emergency department trauma call roster is a hospital-specific list of licensed trauma care providers assigned to trauma care, including date(s) of coverage and back-up licensed trauma care providers when indicated;

[K] **(O)** EMS Bureau means the Missouri Department of Health and Senior Services Emergency Medical Services Bureau;

(P) ENPC course means

[*L*] **(Q)** Glasgow coma scale is a scoring system for assessing a patient's level of consciousness utilizing a point system which measures eye opening, verbal response, and motor response. The higher the total score, the better the patient's neurological status;

(R) Hospital is an establishment as defined in the hospital licensing law, subsection 2 of section 197.030, RSMo, or a hospital operated by the state;

[*M*] **(S)** Immediately available (IA) means being present at bedside at the time of the patient's arrival at the hospital when prior notification is possible and no more than twenty (20) minutes from the hospital under normal driving and weather conditions;

[*N*] **(T)** In-house (IH) means being on the hospital premises twenty-four (24) hours a day;

[*O*] **(U)** Liaison means one (1) physician representative from each of the following areas: Emergency Medicine, Neurosurgery, Orthopedics, and Anesthesia who is selected to attend the Performance Improvement and Patient Safety Committee and to disseminate information to the other physicians within his/her specialty taking trauma call;

(V) Trauma care providers are physicians, registered nurses, nurse practitioners or physician assistants licensed by the state of Missouri.

[*P*] **(W)** Missouri trauma registry is a statewide data collection system to compile and maintain statistics on mortality and morbidity of trauma victims, using a reporting method provided by the Missouri Department of Health and Senior Services;

[*Q*] **(X)** Multidisciplinary trauma conference means a meeting of members of the trauma team and other appropriate hospital personnel to review the care of trauma patients at the hospital;

[*S*] **(Y)** PALS means Pediatric Advanced Life Support, ENPC means Emergency Nurses Pediatric Course, and APLS means Advanced Pediatrics Life Support; when required, certification shall be maintained;

(Z) Patient is an individual who is sick, injured, wounded, diseased, or otherwise incapacitated or helpless, or dead, excluding deceased individuals being transported from or between private or public institutions, homes or cemeteries, and individuals declared dead prior to the time an ambulance is called for assistance;

(AA) Physician is a person licensed as a physician pursuant to chapter 334, RSMo;

[*T*] **(BB)** Physician advisory group is two (2) or more physicians who collectively assume the role of a medical advisor;

[*U*] **(CC)** Promptly available (PA) means arrival at the patient's bedside within thirty (30) minutes after notification of [*a patient's arrival at the hospital under normal driving and weather conditions*] **the patient**;

(DD) Protocol is a predetermined, written medical care guideline, which may include standing orders;

(EE) Qualified individual is a trauma care provider who demonstrates administrative ability and shows evidence of educational preparation and clinical experience in the care of injured patients.

[*V*] **(FF)** R is a symbol to indicate that a standard is a requirement for trauma center designation at a particular level;

[*W*] **(GG)** Review is the inspection of hospitals to determine compliance with the rules of this chapter. There are four (4) types of reviews: the initial review of hospitals never before designated as trauma centers or hospitals never before reviewed for compliance with the rules of this chapter or hospitals applying for a new level of trauma center designation; the verification review to evaluate the correction of any deficiencies noted in a previous review; and the validation review, which shall occur every five (5) years to assure continued compliance with the rules of this chapter, and a focus review to allow review of substantial deficiencies by a review team;

[*X*] **(HH)** Revised trauma score (RTS) is a numerical methodology for categorizing the physiological status of trauma patients;

(II) Rural places is defined by the U.S. Census Bureau as any incorporated place or census designated place with fewer than 2,500 inhabitants that is located outside of an urbanized area.

[*Y*] **(JJ)** Senior trauma surgery resident is a physician in at least the third post-graduate year of study;

[Z] **(KK)** Severely injured adult patient is an injured patient with a glasgow coma score (GCS) less than fourteen (14) or a systolic blood pressure less than ninety (90) millimeters of mercury or respirations less than ten (10) per minute or more than twenty-nine (29) per minute;

[*AA*] **(LL)** Severely injured child is defined as a patient fourteen (14) years of age or less having a GCS less than fourteen (14), shock following injury, pediatric trauma score less than eight (8), or with any of the following conditions: unable to establish or maintain an airway; ineffective respiratory effort; penetrating injury to head, neck, chest, abdomen, or extremity proximal to elbow or knee; burns greater than ten percent (10%) of the body surface area or involving inhalation injury; two (2) or more proximal long bone fractures or pelvic fracture; open or depressed skull fracture; suspected spinal cord injury and/or paralysis; amputation proximal to wrist or ankle; facial or tracheal injury with airway compromise; pre-existing medical conditions; or respiratory or cardiopulmonary arrest after injury;

I.
- All penetrating injuries to head, neck, torso, boxer short and T-shirt coverage areas
- Airway compromise or obstruction, flail chest, hemo- or pneumothorax, patients intubated on scene
- Two or more proximal long-bone fractures
- *Extremity trauma with loss of distal pulses*
- Amputation proximal to wrist and ankle (follow replant protocol and local/regional plan)
- Pelvic fractures
- Open or depressed skull fractures
- Paralysis or signs of spinal cord or cranial nerve injury
- Active or uncontrolled hemorrhage
- Isolated BURNS: ADULTS: Major burns >20% BSA or any signs of inhalation injury
  PEDS: BURNS > 10% BSA or any signs of inhalation injury
  (follow burn protocol and local regional plan)
- Burns with associated trauma: follow burn protocol for resuscitation; transport according to "yes"
- PEDS other: Maxillo-facial or upper airway injury
  Two or more extremity fractures
- Medical Director Discretion

II.
- Falls
  ADULTS ≥ 20 ft (one story = 10 ft.)
  PEDS ≥10 ft.

- High-risk auto crash
  - Intrusion: > 12 in occupant site; > 18 inches in any site
  - Ejection (partial or complete) from automobile or rollover
  - Death in same passenger compartment
  - Vehicle telemetry data consistent with high risk of injury or highway speeds

- High-risk Pedestrian, Cycle, ATV Crash
  - Auto v. Pedestrian/bicyclist thrown, run over, or with significant impact, >or = 20 mph
  - Motorcycle or ATV crash > or =20 mph with separation of rider or rollover

- Crush, degloved or mangled extremity
- Femur fracture
- All open fractures
- Penetrating injuries distal to T shirt and boxer areas to wrist and to ankle
- Assault with prolonged LOC
- Non– major burns with associated trauma
- Pregnancy with acute abdominal pain and traumatic mechanism
- PEDS
  - Unrestrained child 8 years of age or younger
  - Seat Belt Sign

[*BB*] **(MM)** Surgical trauma call roster is a hospital-specific list of surgeons **in Level I, II and III trauma centers** assigned to trauma care, including date(s) of coverage and back-up surgeons when indicated;

[*CC*] **(NN)**Trauma center is a hospital that has been designated in accordance with the rules in this chapter to provide systematized medical and nursing care to trauma patients. Level I is the highest level of designation and functions as a resource center for the hospitals within that region. Level II is the next highest level of designation dealing with large volumes of serious trauma. Level III is the next level with limited resources; **Level IV is the lowest level with limited resources that provides access into the trauma system for non-metropolitan areas the state.**

[*DD*] **(OO)** Trauma medical director is a surgeon designated by the hospital **in Level I, II and III trauma centers,** who is responsible for the trauma service and performance improvement and patient safety programs related to trauma care**. In a Level IV trauma center, the trauma medical director is a physician designated by the hospital who is responsible for the trauma service and performance improvement and patient safety programs related to trauma care**;

[*EE*] **(PP)** Trauma nurse coordinator/trauma program manager is a registered nurse or other qualified individual designated by the hospital with responsibility for monitoring and evaluating the care of trauma patients and the coordination of performance improvement and patient safety programs for the trauma center in conjunction with the trauma medical director;

TNCC course means

[*FF*] **(QQ)** Trauma nursing course is an education program in nursing care of trauma patients;

(RR) Trauma patient is a person who has acquired injuries and/or wounds brought on by either an outside force or an outside energy. These injuries and/or wounds may affect one or more body systems by blunt, penetrating or burn injuries. These injuries may be life altering, life threatening or ultimately fatal wounds.

[*GG*] **(SS)** Trauma service is an organizational component of the hospital specializing in the care of injured patients;

(TT) Urbanized area is a densely settled territory included in an urbanized area or urban cluster as defined by the US Census Bureau.

[HH] **(TT)** Trauma team **in Level I, II and III trauma centers** is a team consisting of the emergency physician, physicians on the surgical trauma call roster, appropriate anesthesiology staff, nursing and other support staff as needed**. In a Level IV trauma center, the trauma team is a team consisting of the emergency physician, licensed trauma care providers on the emergency trauma call roster, nursing and other support staff as needed**;

[*II*] **(UU)** Trauma team activation protocol is a hospital document outlining the criteria used to identify severely injured patients and the procedures for notification of trauma team members and indicating surgical and non-surgical specialty response times acceptable for treating major trauma patients; and

[*JJ*] **(VV)** Trauma triage is an estimation of injury severity at the scene of an accident.

*AUTHORITY: section 190.185, RSMo Supp. 200[7]**8** and section 190.241, HB 1790, 94th General Assembly, Second Regular Session, 2008.* Emergency rule filed Aug. 28, 1998, effective Sept. 7, 1998, expired March 5, 1999. Original rule filed Sept. 1, 1998, effective Feb. 28, 1999. Amended: Filed Jan. 16, 2007, effective Aug. 30, 2007. Amended: Filed May 19, 2008, effective Jan. 30, 2009.*

**Original authority: 190.185, RSMo 1973, amended 1989, 1993, 1995, 1998, 2002 and 190.241, RSMo 1987, amended 1998, 2008.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500) in the aggregate.

*NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed with Teresa Generous, Director, Department of Health and Senior Services, Division of Regulation and Licensure, PO Box 570, Jefferson City, MO 65102. To be considered, comments must be received within thirty (30) days after publication of this notice in the **Missouri Register**. No public hearing is scheduled.*