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

19 CSR 30-40.410 Definitions and Abbreviations Relating to Trauma Centers. The department is amending section (1).

PURPOSE: This amendment defines severely injured child and adds educational programs in the definitions.

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

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

(E) 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;

(F) 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;

(G) 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;

(H) 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;

(I) Continuing nursing education means education approved or recognized by a national [*nurses'*] **and/or state professional** organization and/or trauma medical director;

(J) 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;

(K) 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;

(L) 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;

(M) In-house (IH) means being on the hospital premises twenty-four (24) hours a day;

(N) [*Major pediatric trauma case means a patient fifteen (15) years of age or under with a revised trauma score of 11 or less*;] **Liaison means one 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;**

(O) [*Major trauma case is a patient with an injury severity score of more than fifteen (15), using the scoring method described in the article "The Injury Severity Score," pages 187-196 of The Journal of Trauma, Vol. 14, No. 3, 1974*;] **Core surgeon is a member of the trauma team listed on the trauma call schedule ten percent (10%) of the time or greater;**

(P) [*Major trauma patient means a trauma patient with cardiopulmonary arrest, unstable blunt or penetrating chest or abdominal injury, airway compromise, systolic blood pressure less than ninety (90) millimeters of mercury, pulse less than sixty (60) or greater than one hundred (100) per minute with clinical signs of shock, severe neurological injuries or signs of deteriorating neurological status, or prolonged loss of consciousness*;] **Non-core surgeon is a member of the trauma call team listed on the trauma call schedule less than ten percent (10%) of the time;**

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

(R) 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) PALS means pediatric advanced life support, [*a course of training available through the American Heart Association*] **ENPC means Emergency Nurses Pediatric Course, and APLS means Advanced Pediatrics Life Support**; when required, certification shall be maintained;

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

(U) Promptly available (PA) means arrival at the hospital **at the patient's bedside** within thirty (30) minutes after notification of a patient's arrival at the hospital;

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

(W) Revised trauma score (RTS) is a numerical methodology for categorizing the physiological status of trauma patients;

(X) 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;

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

(*Z*) Severely injured **adult** patient is an injured patient with a glasgow coma score **(GCS)** less than [*thirteen (13)*] **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) Severely injured child is defined as a patient fourteen (14) years of age or less having a GCS less than 14, shock following injury, pediatric trauma score less than 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 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, respiratory or cardiopulmonary arrest after injury;

[*AA*]**(BB)** Surgical trauma call roster is a hospital-specific list of surgeons assigned to trauma care, including date(s) of coverage and back-up surgeons **when indicated**; In a level IV trauma center, the Emergency Room 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**;

[*BB*]**(CC)** 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 [, *usually representing a large urban hospital with a university affiliation*.] **and functions as the resource center for the hospitals within that region**. Level II is the next highest level of designation [*and is usually a large community hospital*] dealing with large volumes of serious trauma [*in a geographic area lacking a hospital with resources of level 1*]. Level III is the next level [*and usually represents a small rural hospital with a commitment to trauma care that is commensurate*] with limited resources; **Level IV is the next level with very limited, basic resources. Their function is to identify, stabilize and facilitate rapid transfer of the severely injured trauma patient to a higher level of care. Situations in which one shall consider transport of the severely injured trauma patient 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;

[*CC*]**(DD)** Trauma medical director is a surgeon designated by the hospital who is responsible for the trauma service and [*quality assurance*] **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;

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

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

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

[*GG*]**(HH)** Trauma team 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 trauma call roster, nursing and other support staff as needed;

[*HH*]**(II)** Trauma team activation protocol is a hospital document outlining the criteria used to identify *[major trauma]* **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

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

(KK) Licensed trauma care providers are physicians, nurse practitioners or physician assistants.

(LL) A qualified individual is one that demonstrates administrative ability and show evidence of educational preparation and clinical experience in the care of injured patients.

As defined in HB 1790:

"Department", the department of health and senior services, state of Missouri;

"Director", the director of the department of health and senior services or the director's duly authorized representative;

"Hospital", an establishment as defined in the hospital licensing law, subsection 2 of section 197.020, RSMo, or a hospital operated by the state;

"Patient", 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;

"Person", as used in these definitions and elsewhere in sections 190.001 to 190.245, any individual, firm, partnership, copartnership, joint venture, association, cooperative organization, corporation, municipal or private, and whether organized for profit or

not, state, county, political subdivision, state department, commission, board, bureau or fraternal organization, estate, public trust, business or common law trust, receiver, assignee for the benefit of creditors, trustee or trustee in bankruptcy, or any other service user or provider;

"Physician", a person licensed as a physician pursuant to chapter 334, RSMo;

"Protocol", a predetermined, written medical care guideline, which may include standing orders;

AUTHORITY: sections 190.185 and 190.241, RSMo [Supp. 1998] **2000**.* *Emergency rule filed*
Aug. 28, 1998, effective Sept. 7, 1998, expired March 5, 1999. Original rule filed Sept. 1, 1998, effective Feb. 28, 1999.

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

*AUTHORITY: sections 190.185, **RSMo Supp 2007,** and 190.241, RSMo [Supp. 1998*] **2000**.* *Emergency rule filed Aug. 28, 1998, effective Sept. 7, 1998, expired March 5, 1999. Original rule filed Sept. 1, 1998, effective Feb. 28, 1999.*

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

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars ($500.00) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars ($500.00) in the aggregate.

NOTICE TO SUBMIT COMMENTS: Anyone may file a statement in support of or in opposition to this proposed amendment with Kimberly O'Brien, 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 Health Standards & Licensure
Chapter 40 - Trauma Center Regulations

PROPOSED AMENDMENT

19 CSR 30-40.440 (Level IV) Trauma Center Designation Requirements

PURPOSE: This rule establishes the requirements for participation in Missouri's trauma center program.

(1) Participation in Missouri's trauma center program is voluntary and no hospital shall be required to participate. No hospital shall in any way indicate to the public that it is a trauma center unless that hospital has been designated as such by the *Bureau* of Emergency Medical Services (EMS). Hospitals desiring trauma center designation shall apply to the *Bureau* of EMS. Only those hospitals found by review to be in compliance with the requirements of the rules in this chapter shall be designated by the *Bureau* of EMS as trauma centers.

(2) The application required for trauma center designation shall be made upon forms prepared or prescribed by the *Bureau* of EMS and shall contain information the *Bureau* of EMS deems necessary to make a fair determination of eligibility for review and designation in accordance with the rules of this chapter.

(A) An application shall include the following information: designation level requested; name, address and telephone number of hospital; name of chief executive officer, chairman/president of board of trustees, surgeon in charge of trauma care, trauma nurse coordinator/**program manager**, director of emergency medicine, and director of trauma intensive care; number of emergency department trauma caseload, trauma team activations, computerized tomography scan capability, magnetic resonance imaging capability, operating rooms, intensive care unit/critical care unit beds, burn beds, rehabilitation beds, trauma surgeons, neurosurgeons, orthopedists, emergency department physicians, anesthesiologists, certified registered nurse anesthetists, pediatricians, and pediatric surgeons; date of application; and signatures of the chairman/president of board of trustees, hospital chief executive officer, physician in charge of trauma, and director of emergency medicine.

(B) The *Bureau* of EMS shall notify the hospital of any apparent omissions or errors in the completion of the application and shall contact the hospital to arrange a date for the review.

(C) Failure of a hospital to cooperate in arranging for a mutually suitable date for review shall constitute forfeiture of application when a hospital's initial review is pending or suspension of designation when a hospital's verification or validation review is pending.

(D) Hospitals designated as trauma centers under the previous designation system shall maintain their designation until a review is conducted using the rules of this chapter.

(3) The review of hospitals for trauma center designation shall include interviews with designated hospital staff, a review of the physical plant and equipment, and a review of records and documents as deemed necessary to assure compliance with the requirements of the rules of this chapter. The cost of any and all site reviews shall be paid by each applicant

hospital or renewing trauma center unless adequate funding is available to the *Bureau* of EMS to pay for reviews.

(A) For the purpose of reviewing trauma centers and hospitals applying for trauma center designation, the *Bureau* of EMS shall use review teams consisting of two (2) surgeons, one (1) emergency physician **who are experts in trauma care**, and one **trauma nurse coordinator/trauma program manager** experienced in trauma center. **The team shall be disinterested politically and financially in the hospitals to be reviewed.** Out-of-state review teams shall conduct levels I and II reviews. In-state reviewers may conduct level III and level IV reviews**. When utilizing in-state review teams, the Level III and IV trauma center shall have the right to refuse one review team.**

(B) Any substantial deficiencies cited in the initial review or the validation review regarding patient care issues, especially those related to delivery of timely surgical intervention, shall require a focused review to be conducted. When deficiencies involve documentation or policy or equipment, the hospital's plan of correction shall be submitted to the *Bureau* of EMS and verified by *Bureau* of EMS personnel.

(C) The verification review shall be conducted in the same manner and detail as initial and validation reviews. A review of the physical plant will not be necessary unless a deficiency was cited in the physical plant in the preceding initial or validation review. If deficiencies related only to a limited number of areas of hospital operations, a focused review shall be conducted. The review team for a focused review shall be comprised of review team members with the required expertise to evaluate corrections in the specified deficiency area.

(D) Validation reviews shall occur every five (5) years.

(E) Upon completion of a review, the reviewers shall submit a report of their findings to the *Bureau* of EMS **within thirty (30) days of completion of the review**. The report shall state whether the specific standards for trauma center designation have or have not been met; if not met, in what way they were not met. The report shall include the patient chart audits and a narrative summary to include pre-hospital, hospital, trauma service, emergency department, clinical lab, **performance** improvement **and patient safety programs**, education, outreach, research, chart review, and interviews. The *Bureau* of EMS has final authority to determine compliance with the rules of this chapter.

(F) Within thirty (30) days after receiving a review report, the *Bureau* of EMS shall return a copy of the report in whole to the chief executive officer of the hospital reviewed. Included with the report shall be notification indicating that the hospital has met the criteria for trauma center designation or has failed to meet the criteria for the designation level for which it applied and options the hospital may pursue.

(G) If a verification review is required, the hospital shall be allowed a period of **six (6)** months to correct deficiencies. A plan of correction form shall be provided to the *Bureau* of EMS by the hospital and returned to the *Bureau* of EMS within **thirty (30)** days after notification of review findings.

(H) Once a review is completed, a final report shall be prepared by the *Bureau* of EMS. The final report shall be public record and shall disclose the standards by which the reviews were conducted and whether the standards were met. The reports filed by the reviewers shall be held confidential and shall be disclosed only to the hospital's chief executive officer or an authorized representative.

(4) The *Bureau* of EMS shall have the authority to put on probation, suspend, revoke or deny trauma center designation if there is reasonable cause to believe that there has been a substantial failure to comply with the requirements of the rules in this chapter. Once designated as a trauma center, a hospital may voluntarily surrender the designation at any time without giving cause, by contacting the *Bureau* of EMS. In these cases, the application and review process shall be completed again before the designation may be reinstated.

(A) Trauma center designation shall be valid for a period of five (5) years from the date the trauma center is designated. Expiration of the designation shall occur unless the trauma center applies for validation review within this five-year period. **Trauma center designation shall not be transferable.**

(B) The *Bureau* of EMS shall investigate complaints against trauma centers. Failure of the hospital to cooperate in providing documentation and interviews with appropriate staff may result in revocation of trauma center designation. Any hospital, which takes adverse action toward an employee for cooperating with the *Bureau* of EMS regarding a complaint, is subject to revocation of trauma center designation.

AUTHORITY*: sections 190.185 and 190.241, RSMo [Supp. 1998]* **2000**.* *Emergency rule filed*
Aug. 28, 1998, effective Sept. 7, 1998, expired March 5, 1999. Original rule filed Sept. 1, 1998, effective Feb. 28, 1999.

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

Title 19 - DEPARTMENT OF HEALTH AND SENIOR SERVICES
Division 30 - Division of Health Standards & Licensure
Chapter 40 - Trauma Center Regulations

PROPOSED AMENDMENT

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

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

PUBLISHER'S NOTE IV-IA *indicates an immediately available requirement for level **IV** trauma centers respectively*. IV-PA *indicates a promptly available requirement for level **IV** trauma centers.*

(1) General Standards for Level IV 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.

(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.

(C) 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 licensed trauma care providers on the trauma call roster 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 EMS committees. Regular attendance shall be defined by each trauma service, but shall be not less than fifty (50) % of all meetings. The trauma medical director must ensure and document dissemination of information and findings from the peer review meetings to the non-core surgeons on the trauma call panel.**

(D) There shall be a lighted designated helicopter landing area at the trauma center to accommodate incoming medical helicopters.

1. The landing area shall serve solely as the receiving and take-off area for medical helicopters and shall be cordoned off at all times from the general public to assure its continual availability and safe operation.

2. The landing area shall be on the hospital premises no more than three (3) minutes from the emergency room.

(E) The hospital shall appoint a board-certified physician to serve as the trauma medical director.

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

2. The trauma medical director shall be a member of the l**icensed trauma care** provider trauma call roster.

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.

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

(F) The trauma program manager shall be a registered nurse or other qualified individual.*[There shall be a trauma nurse coordinator/**trauma program manager**.]*

1. There shall be a job description and organization chart depicting the relationship between the trauma nurse coordinator/**trauma program manager** and other services.

2. The trauma nurse coordinator/**trauma program manager** shall document a minimum average of **sixteen (16) hours** of continuing nursing education in trauma care every year.

(G) By the time of the initial review, all members of the **licensed trauma care provider** 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. ***[Current certification must then be maintained by each]*** **Each licensed trauma care provider on the trauma call roster must remain current**.

(H) All members of the trauma call roster shall document a minimum average of eight (8) hours of CME in trauma care every year. In hospitals designated as adult/pediatric trauma centers, providing care to injured children fourteen (14) years of age and younger four (4) of the eight (8) hours of education per year must be applicable to pediatric trauma.

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

(J) 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. 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, or 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 references in this rule as published by the ACS in 2008 and is available at the ACS, 633 N. St. Clair., Chicago, IL 60611. This rule does not incorporate any subsequent amendments or additions.**

(K) 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.

1. The trauma team activation protocol shall provide for immediate notification and response requirements **as previously defined** for trauma team members when a **severely injured** patient is en route to the trauma center.

(L) 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.

(M) There shall be no level IV trauma centers designated within fifteen (0, 15, 30?) miles of any Missouri level I , II, or III trauma center.

(2) Hospital Organization 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.

(B) All members of the ED/Trauma call roster shall comply with the availability and response requirements in subsection (2)(D) 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.

(C) In a Level IV center call rosters providing for back-up coverage for licensed trauma care providers will be maintained or a written transfer agreement to a regional Level I or II center provided

(3) Standards for Special Facilities/Resources/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.

a. 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 with a response time of 20 minutes or less of notification.

b. All emergency department licensed trauma care providers shall have successfully completed ATLS and maintain current certification. **Physicians who are certified by boards other than emergency medicine who treat trauma patients in the emergency department are required to have and [maintain] current ATLS status.**

[*c*]. There shall be written protocols defining the relationship of the emergency department licensed trauma care providers to other members of the trauma team.

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

e. Registered nurses credentialed in trauma nursing shall document a minimum of eight (8) hours of trauma-related continuing nursing education per year. **Registered nurses credentialed in trauma care shall maintain current provider status in Trauma Nursing Core Curriculum or Advanced Trauma Care for Nurses and either Pediatric Advanced Life Support, Advanced Pediatric Life Support or Emergency Nursing Pediatric Course within one (1) year of employment in the**

emergency department. The requirement for Trauma Nurse Core Curriculum, Advanced Pediatric Life Support, or Emergency Nursing Pediatric Course may be waived in centers where policy exists diverting injured children to a pediatric trauma center and where a pediatric trauma center is immediately available and a performance improvement filter reviewing any children seen is maintained.

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

A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and sources of oxygen

B. Suction devices

C. Electrocardiograph, **cardiac monitor** and defibrillator

D. Central line insertion equipment or IO insertion

E. All standard intravenous fluids and administration devices and intravenous catheters

F. Sterile surgical sets for procedures standard for the emergency department

G. Gastric lavage equipment

H. Drugs and supplies necessary for emergency care

I. Two-way radio linked with emergency medical services (EMS) vehicles

J. End-tidal carbon dioxide monitor

K. Temperature control devices for patient, parenteral fluids and blood and

L. Rapid infusion system for parenteral infusion

3. There shall be documentation that all equipment is checked according to the hospital preventive maintenance schedule.

4. There shall be X-ray capability with twenty-four (24) hour coverage by technicians (IA).

a. Resources shall include

(1.) Resuscitation equipment available to the radiology department

(2.) 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. **Nurses providing care for the trauma patients that are not accompanied by a trauma nurse while in the radiology department during initial evaluation and resuscitation shall maintain the same credentialing required of emergency department nursing personnel.**

5. 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.** (B) The hospital shall have acute hemodialysis capability or a written transfer agreement.

(C) The hospital shall have a written transfer agreement for burn patients.

(D) The hospital shall have injury rehabilitation and spinal cord injury rehabilitation capability or a written transfer agreement.

(E) The hospital shall **possess** pediatric trauma management capability or **maintain** written transfer agreements.

(F) The hospital shall have **a mechanism for timely interpretation to aid in patient management** (PA).

(G) 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.

(H) The following clinical laboratory services shall be available twenty-four (24) hours a day:
1. Standard analyses of blood, urine and other body fluids
2. [Blood typing and cross-matching;]
3. Coagulation studies
4. Comprehensive blood bank or access to a community central blood bank and adequate hospital blood storage facilities
5. Blood gases and pH determinations
[6. Serum and urine osmolality;
7. Microbiology;
8. Drug and alcohol screening; and]
9. A written protocol that the trauma patient receives priority.

(4) Standards for Programs in Performance Improvement Patient Safety, Outreach, Public Education and Training for Trauma Center Designation.
(A) There shall be an ongoing **Performance Improvement 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.
(B) The following additional **Performance Improvement Patient Safety** measures shall be required:
1. Regular reviews of all trauma-related deaths
2. A regular morbidity and mortality review, **at least quarterly**;
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;
4. Regular reviews of the reports generated by the Department of Health and Senior Services from the Missouri trauma registry and the head and spinal cord injury registry;
5. Regular reviews of pre-hospital trauma care including inter-facility transfers and all adult patients seen in pediatric centers;
6. Participation in reviews of regional systems of trauma care as established by the Department of Health and Senior Services;
7. Trauma patients remaining greater than six (6) hours prior to transfer will be reviewed as a part of the performance improvement and patient safety program.
(C) The hospital shall be actively involved in local and regional emergency medical services systems by providing training and clinical resources.
(D) There shall be a hospital-approved procedure for credentialing nurses in trauma care.
1. All nurses **providing care to severely injured patients and** assigned to the emergency department shall complete a minimum of sixteen (16) hours of trauma nursing courses to become credentialed in trauma care.
2. The content and format of any trauma nursing courses developed and offered by a hospital shall be developed in cooperation with the trauma medical director. A copy of the course curriculum used shall be filed with the ***Bureau*** of EMS.
3. Trauma nursing courses offered by institutions of higher education in Missouri **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 program manager** and shall present evidence of satisfactory completion of the course.
(E**) A hospital trauma diversion protocol must be maintained in accordance with state regulations. This protocol is designed to allow best resource management within a given area and should not be considered punitive. This policy must be coordinated with policies within the appropriate EMS region. This protocol must contain a defined Performance Improvement Patient Safety process to review and validate established criteria within that institution. Hospital diversion information must be maintained to include date, length of time and reason for diversion.**
(F) 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.

(5) Standards for the Programs in Trauma Research for Trauma Center Designation.
(A) The hospital shall agree to cooperate and participate with the *Bureau* of EMS in conducting epidemiological studies and individual case studies for the purpose of developing injury control and prevention programs. (I-R, II-R, III-R)

AUTHORITY: sections 190.185 and 190.241 RSMo [Supp. 1998] 2000. Emergency rule filed Aug. 28, 1998, effective Sept. 7, 1998, expired March 5, 1999. Original rule filed Sept. 1, 1998, effective Feb. 28, 1999.*

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