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 30-40.430 Standards for Trauma Center Designation. The department is amending sections (1), (3), and (4) and renumbering throughout section (1).

PURPOSE: This amendment changes continuing education hours/credentialing requirements to be consistent with required continuing education/credentialing requirements by the national verifying body for trauma centers, adds credentialing courses for nurses, changes EMS Bureau to department's time critical diagnosis unit, requires nurses in the ICU to be current in ATLS, updates the publication date for the National Trauma Data Standard, removes continuing medical education requirements for physicians who are emergency medicine board certified or board eligible through the American Board of Emergency Medicine or the American Osteopathic Board of Emergency Medicine and who are practicing in the emergency department of a trauma center, removes requirements relating to the operation or construction of a helipad at trauma centers and adds an option for trauma centers to enter trauma data into a national data registry or databank that will allow the trauma center to perform its performance improvement and patient safety program requirements.

EDITOR'S NOTE: I-R, II-R or III-R after a standard indicates a requirement for level I, II or III trauma center respectively. I-IH, II-IH or III-IH after a standard indicates an in-house requirement for level I, II or III trauma center respectively. I-IA, II-IA or III-IA indicates an immediately available requirement for level I, II or III trauma center respectively. I-PA, II-PA or III-PA indicates a promptly available requirement for level I, II or III trauma center respectively.

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.
- (D) The trauma center shall have a helicopter landing area. (I-R, II-R, III-R) [There shall be a lighted designated helicopter landing area at the trauma center to accommodate incoming medical helicopters. (I-R, II-R, III-R)

- 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. (I-R, II-R, III-R)
- 2. The landing area shall be on the hospital premises no more than three (3) minutes from the emergency room. (I-R, II-R, III-R)
- (E) The hospital shall appoint a board-certified surgeon to serve as the trauma medical director. (I-R, II-R, III-R)
- 1. There shall be a job description and organization chart depicting the relationship between the trauma medical director and other services. (I-R, II-R, III-R)
- 2. The trauma medical director shall be a member of the surgical trauma call roster. (I-R, II-R, III-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. (I-R, II-R, III-R)
- 4. The trauma medical director shall document [a minimum average of sixteen (16)] thirty-six (36) hours of continuing medical education (CME) in trauma care every three (3) years. (I-R, II-R, III-R)
- 5. The trauma medical director shall participate in the trauma center's research and publication projects. (I-R)
- (F) There shall be a trauma nurse coordinator/trauma program manager. (I-R, II-R, III-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. (I-R, II-R, III-R)
- 2. The trauma nurse coordinator/trauma program manager shall document [a minimum average of sixteen (16)] thirty-six (36) hours of continuing nursing education in trauma care every three (3) years. (I-R, II-R, III-R)
- (G) By the time of the initial review, all general surgeon members of the surgical trauma call roster shall have successfully completed or be registered for a provider Advanced Trauma Life Support (ATLS) course. Current certification must then be maintained by each general surgeon on the trauma call roster. (I-R, II-R, III-R)
- [(H) All members of the surgical trauma call roster and emergency medicine physicians including liaisons for anesthesiology, neurosurgery, and orthopedic surgery 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-R, II-R, III-R)
- *I)*] **(H)** The hospital shall demonstrate that there is a plan for adequate post-discharge follow-up on trauma patients, including rehabilitation. (I-R, II-R, III-R)

- [(J)] (I) 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. 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). Trauma centers shall enter trauma care data elements for each patient who meets these criteria. 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 2022 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. (I-R, II-R, III-R)
- 1. Trauma centers shall enter trauma care data elements for each patient who meets the criteria above into the following:
- A. Trauma centers shall submit data into the department's Missouri trauma registry. The data required in paragraph (1)(I) above shall be submitted electronically into the Missouri trauma registry via the department's website at www.health.mo.gov; or (I-R, II-R, III-R)
- B. Trauma centers shall submit data into a national data registry or data bank capable of being used by the trauma center to perform its ongoing performance improvement and patient safety program requirements for its trauma patients. The trauma center shall submit data for each data element included in the national data registry or data bank's data system. (I-R, II-R, III-R)

[The registry shall be submitted electronically in a format defined by the Department of Health and Senior Services.]

- 2. Electronic data shall be submitted quarterly, ninety (90) days after the quarter ends. The trauma registry must be current and complete. (I-R, II-R, III-R)
- 3. Information provided by hospitals on the trauma registry shall be subject to the same confidentiality requirements and procedures contained in section 192.067, RSMo. (I-R, II-R, III-R)

- (J) A patient log of those patients entered into the trauma registry 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.] (I-R, II-R, III-R) [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. (I-R, II-R, III-R)]
- (3) Standards for Special Facilities/Re-sources/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. (I-R, II-R, III-R)
- A. The physician director of the emergency department shall be board-certified or board-admissible in emergency medicine. (I-R, II-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] in the emergency department twenty-four (24) hours a day. 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. (I-R, III-R,
- C. All emergency department physicians shall be certified in ATLS at least once. Physicians who are certified by boards other than emergency medicine who treat trauma patients in the emergency department are required to have current ATLS status. (I-R, II-R, III-R)
- D. There shall be written protocols defining the relationship of the emergency department physicians to other physician members of the trauma team. (I-R, II-R, III-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. (I-R, III-R, III-R)
- (I) [Registered nurses credentialed in trauma nursing shall document a minimum of eight (8) hours of trauma-related continuing nursing education per year. (I-R, III-R)

- (II)] Registered nurses credentialed in trauma care shall maintain current provider status in the Trauma Care After Resuscitation (TCAR), Trauma Nurse Core Curriculum (TNCC) or Advanced Trauma Care for Nurses (ATCN) and either Pediatric Care After Resuscitation (PCAR), 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. The requirement for Pediatric Care After Resuscitation, Pediatric Advanced Life Support, 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 adjacent and a performance improvement filter reviewing any children seen is maintained. 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. 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. Trauma Care After Resuscitation and Pediatric Care After Resuscitation are incorporated by reference in this rule as published in 2022 by TCAR Education Programs and are available at TCAR Education Programs, 33456 Havlik Drive, Scappoose, Oregon 97056. This rule does not incorporate any subsequent amendments or additions. (I-R, II-R, III-R)
- 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—I-R, II-R, III-R;
 - B. Suction devices—I-R, II-R, III-R;
 - C. Electrocardiograph, cardiac monitor, and defibrillator—I-R, II-R, III-R;
 - D. Central line insertion equipment—I-R, II-R, III-R;
- E. All standard intravenous fluids and administration devices including intravenous catheters—I-R, II-R, III-R;
- F. Sterile surgical sets for procedures standard for the emergency department—I-R, II-R, III-R;
 - G. Gastric lavage equipment—I-R, II-R, III-R;
 - H. Drugs and supplies necessary for emergency care—I-R, II-R, III-R;

- I. Two-way radio linked with emergency medical service (EMS) vehicles—I-R, III-R, III-R;
- J. End-tidal carbon dioxide monitor—I-R, II-R, III-R and mechanical ventilators—I-R, II-R;
- K. Temperature control devices for patient, parenteral fluids, and blood—I-R, II-R, III-R; and
 - L. Rapid infusion system for parenteral infusion—I-R, II-R, III-R.
- 3. There shall be documentation that all equipment is checked according to the hospital preventive maintenance schedule. (I-R, II-R, III-R)
- 4. There shall be a designated trauma resuscitation area in the emergency department. (I-R, II-R)
- 5. There shall be X-ray capability with twenty-four (24)-hour coverage by technicians. (I-IH, II-IH, III-IA)
- 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. (I-R, II-R, III-R)
- (B) The hospital shall meet intensive care unit (ICU) standards for trauma center designation.
- 1. There shall be a designated surgeon medical director for the ICU. (I-R, II-R, III-R)
- 2. A physician who is not the emergency department physician shall be on duty in the ICU or available in-house twenty-four (24) hours a day in a level I trauma center and shall be on call and available within twenty (20) minutes in a level II trauma center.
- 3. The minimum registered nurse/trauma patient ratio used shall be one to two (1:2). (I-R, II-R, III-R)
- 4. Registered nurses shall be credentialed in trauma care within one (1) year of assignment. [documenting a minimum of eight (8) hours of trauma-related continuing nursing education per year.] (I-R, II-R, III-R)
 - 5. Nursing care documentation shall be on a patient flow sheet. (I-R, II-R, III-R)
- 6. Nurses assigned to the ICU shall maintain current provider status in ACLS. At the time of the initial review, nurses assigned to ICU shall have successfully completed or be registered for a provider ACLS course. The requirement for ACLS may be waived in pediatric centers where policy exists diverting injured adults to an adult trauma center and where an adult trauma center is adjacent to the affected pediatric facilities, and a performance improvement filter reviewing any adult trauma patients seen is maintained (I-R, II-R, III-R).
- 7. There shall be separate pediatric and adult ICUs or a combined ICU with nurses trained in pediatric intensive care. In ICUs providing care to children, registered nurses shall maintain credentialing in PALS, APLS, or ENPC. (I-R, II-R)
- 8. There shall be beds for trauma patients or comparable level of care provided until space is available in ICU. (I-R, II-R, III-R)
- 9. Equipment for resuscitation and to provide life support for the critically or seriously injured shall be available for the intensive care unit. In ICUs providing care for the pediatric patient, equipment with age appropriate sizes shall also be available. This equipment shall include, but not be limited to:

- A. Airway control and ventilation equipment including laryngoscopes, endotracheal tubes, bag-mask resuscitator, and a mechanical ventilator—I-R, II-R, III-R;
 - B. Oxygen source with concentration controls—I-R, II-R, III-R;
 - C. Cardiac emergency cart, including medications—I-R, II-R, III-R;
 - D. Temporary transvenous pacemakers—I-R, II-R, III-R;
 - E. Electrocardiograph, cardiac monitor, and defibrillator—I-R, II-R, III-R;
 - F. Cardiac output monitoring—I-R, II-R;
 - G. Electronic pressure monitoring and pulse oximetry—I-R, II-R;
- H. End-tidal carbon dioxide monitor and mechanical ventilators—I-R, II-R, III-R:
 - I. Patient weighing devices—I-R, II-R, III-R;
 - J. Temperature control devices—I-R, II-R, III-R;
 - K. Drugs, intravenous fluids, and supplies —I-R, II-R, III-R; and
 - L. Intracranial pressure monitoring devices—I-R, II-R.
- 10. There shall be documentation that all equipment is checked according to the hospital preventive maintenance schedule. (I-R, II-R, III-R)
- (4) Standards for Programs in Performance Improvement and Improvement Patient Safety Program, Outreach, Public Education, and Training for Trauma Center Designation.
- (F) There shall be a hospital-approved procedure for credentialing nurses in trauma care. (I-R, II-R, III-R)
- 1. All nurses providing care to severely injured patients and assigned to the emergency department or ICU shall complete a [minimum of sixteen (16) hours of] trauma nursing course[s] in order to become credentialed in trauma care. (I-R, II-R, III-R)
- 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 [EMS Bureau] department's time critical diagnosis unit. (I-R, II-R, III-R)
- 3. Trauma nursing courses offered by institutions of higher education in Missouri such as the Advanced Trauma Care for Nurses, Emergency Nursing Pediatric Course, **Trauma Care After Resuscitation**, **Pediatric Care After Resuscitation**, 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. (I-R, II-R, III-R)

AUTHORITY: section 190.185, RSMo [Supp. 2007] 2016 and section 190.241, RSMo Supp. 2022 [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. Emergency amendment filed November 21, 2022, effective December 7, 2022, expires June 4, 2023.

*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 amendment with Nicole Gamm at Nicole.Gamm@health.mo.gov or Missouri Department of Health and Senior Services, P.O. Box 570, Jefferson City, Missouri 65101-0570. 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.