

Level III Trauma Center

Designation Criteria for Level III Trauma Center

Criteria for designation of Level III Trauma Centers are based upon Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006. Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level III Trauma Center in Idaho.

1. Trauma System
Time Sensitive Emergencies (TSE)
1.1 The center's trauma program staff has sufficient involvement in regional trauma system planning, development, and operation.
Center Mission
1.2 There is a current resolution supporting the trauma center from the medical staff.
1.3 There is a current resolution supporting the trauma center from the hospital board.
1.4 There is sufficient infrastructure, staff, equipment, and support to the trauma program to provide adequate provision of care.
1.5 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.
2. Description of Trauma Center
Description of the Trauma Center
2.1 All trauma facilities are on the same campus.
2.2 The trauma program is empowered to address issues that involve multiple disciplines.
2.3 The adult trauma center that treats more than 100 injured children annually has a pediatric Emergency Department (ED) area, a pediatric intensive care area, appropriate resuscitation equipment, and pediatric-specific trauma Performance Improvement and Patient Safety (PIPS) program.
2.4 The center provides some means of referral and access to trauma center resources.
2.5 Center provides initial resuscitation of the trauma patient and immediate intervention to control hemorrhage and to assure maximum stabilization prior to referral to an appropriate higher level of care.
Trauma Leadership
Trauma Medical Director
2.6 The trauma program has a Trauma Medical Director with the authority and administrative support to lead the program.
2.7 The Trauma Medical Director is a board-certified surgeon or an American College of Surgeons (ACS) Fellow.
2.8 The Trauma Medical Director is current in Advanced Trauma Life Support (ATLS).

2.9 The Trauma Medical Director has accrued an average of 12 hours annually or 36 hours in 3 years of external** trauma-related Continuing Medical Education (CME).
2.10 The Trauma Medical Director participates in trauma call.
2.11 The Trauma Medical Director maintains personal involvement in patient care, staff education, and professional organizations.
2.12 The Trauma Medical Director has sufficient authority to set qualifications for the trauma servicemembers.
2.13 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the Trauma Medical Director.
2.14 The Trauma Medical Director has the authority to correct deficiencies in trauma care or to exclude from trauma call any trauma team members who do not meet specified criteria.
2.15 The Trauma Medical Director has the authority to recommend changes for the trauma team based on performance review.
2.16 The Trauma Medical Director has the responsibility and authority to determine each general surgeon's ability to participate on the trauma team through the trauma PIPS program and hospital policy.
2.17 The structure of the trauma program allows the Trauma Medical Director to have oversight and authority for care of injured patients who may be admitted to individual surgeons.
2.18 The Trauma Medical Director has the responsibility and authority to ensure compliance with verification requirements.
2.19 The Trauma Medical Director is involved in the development of the center's bypass protocol.
2.20 The Trauma Medical Director documents the dissemination of information to the PIPS committee.
2.21 In circumstances when attendance is not mandated (noncore members), the Trauma Medical Director ensures and documents dissemination of information from the PIPS program.
2.22 The Trauma Medical Director ensures and documents dissemination of information and findings from the Trauma Program Operational Process Performance Improvement Committee (TPOPPC) meetings to noncore surgeons on the trauma team.
2.23 The Trauma Medical Director is accountable for all trauma care and exercises administrative authority for the trauma program.
Trauma Program Manager
2.24 The Trauma Program Manager has clinical experience caring for injured patients and a minimum of 16 hours of trauma-related continuing education per year.
3. Clinical Functions
3.1 The criteria for graded activation is clearly defined by the center and continuously evaluated by the PIPS program.
3.2 The criteria for the highest level of activation is clearly defined and evaluated by the PIPS program.



3.3 The trauma service retains responsibility for its patients and coordinates all therapeutic decisions.

3.4 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the Intensive Care Unit (ICU) team.

3.5 There is a method to identify injured patients, monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners.

3.6 The center has established protocols to ensure immediate and appropriate care of the adult and pediatric trauma patient.

Trauma Team

3.7 Response to all three Trauma Priority levels must be defined and reviewed annually.

3.8 All trauma/general surgeons, emergency physicians, and midlevel providers on the Trauma Team have completed Advanced Trauma Life Support (ATLS) at least once.

3.9 Trauma Team members participate in PIPS and TPOPPC.

3.10 Trauma Team physicians and midlevel providers are credentialed by the medical staff and governing board.

Emergency Department (ED)

3.11 The ED has a designated Emergency Physician Director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.

3.12 Emergency physicians cover in-house emergencies with a PIPS process demonstrating the efficacy of this practice.

3.13 Coverage of emergencies in the ICU leaves the ED with appropriate physician coverage.

3.14 Physicians who are not board-certified in emergency medicine who work in the ED are current in ATLS.

3.15 Emergency physicians on the call panel are regularly involved in the care of injured patients.

3.16 An emergency physician participates in the trauma PIPS program and the TPOPPC.

3.17 A representative from the ED participated in the prehospital PIPS program.

3.18 The emergency medicine representative or designee to the TPOPPC attends a minimum of 50% of these meetings.

3.19 A designated emergency physician is available to the Trauma Medical Director for PIPS issues that occur in the ED.

General Surgery

3.20 All trauma surgeons must have privileges in general surgery.

3.21 The trauma surgeons respond promptly to activations, remain knowledgeable in trauma care principles whether treating locally or transferring to a center with more resources, and participate in PIPS activities.

3.22 Trauma surgeons in adult trauma centers that treat more than 100 injured children annually are credentialed for pediatric trauma care by the center's credentialing body.

3.23 The center has general surgical coverage 24/7.
3.24 The trauma surgeon on call is dedicated to the trauma center while on duty.
3.25 A published backup call schedule for trauma surgery is available.
3.26 Seriously injured patients are admitted to or evaluated by an identifiable surgical service staffed by credentialed trauma providers.
3.27 The trauma surgeon is present in the ED within 30 minutes of notification 24/7 with an 80% achievement rate as monitored by the PIPS program.
3.28 The trauma surgeon on call is involved in the decisions regarding diversion.
3.29 The general surgery core group is defined by the Trauma Medical Director.
3.30 The general surgery core group takes at least 60% of the total trauma call hours each month.
3.31 The general surgery core group attends a minimum of 50% of the TPOPPC meetings.
Orthopedic Surgery
3.32 The center has orthopedic surgery available.
3.33 Orthopedic surgeons taking trauma call must have privileges in general orthopedic surgery.
3.34 Orthopedic surgeons who care for trauma patients are board-certified.
3.35 Orthopedic team members have dedicated call at their institution and a backup call system, or documentation from the PIPS program that delays are not occurring.
3.36 An orthopedic team member is present in the ED within 30 minutes of consultation by the surgical trauma team leader for multiple injured patients 24/7 with an 80% achievement rate.
3.37 An orthopedic surgeon is designated to and participates in the PIPS program, TPOPPC and attend a minimum of 50% of these meetings.
3.38 The design of the backup call system, the responsibility of the orthopedic trauma team liaison, has been approved by the Trauma Medical Director.
3.39 The PIPS liaison has accrued an average of 8 hours annually or 24 hours in 3 years of external** trauma-related CME.
Collaborative Clinical Services
Anesthesia
3.40 Anesthesia services are available 24/7.
3.41 Anesthesia services are on-site within 30 minutes of notification for emergency operations and airway problems 24/7 with an 80% achievement rate as monitored by the PIPS process.
3.42 Anesthesia services are available 24/7 and present for all operations.
3.43 Anesthesia services are promptly available for airway problems.
3.44 All anesthesiologists taking call have successfully completed a residency program.

3.45 When anesthesiology chief residents or Certified Registered Nurse Anesthetists (CRNA) are used to fulfill availability requirement, the staff anesthesiologist on call is (1) advised, (2) promptly available at all times, and (3) present for all operations if requested by the CRNA.

3.46 An anesthesiologist is designated to and participates in the PIPS program, TPOPPC and attend a minimum of 50% of these meetings.

Operating Room (OR)

3.47 The OR is adequately staffed and immediately available.

3.48 Operating rooms are promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement and stabilization and compartment decompression.

3.49 The OR has the all of the following essential equipment:

a. Rapid infusers;

b. Thermal control equipment for patients and resuscitation fluids;

c. Intraoperative radiologic capabilities;

d. Equipment for fracture fixation;

e. Equipment for endoscopic evaluation (bronchoscopy and gastrointestinal endoscopy); and

f. Equipment necessary for craniotomy (unless the center does not offer neurosurgery services).

3.50 A mechanism for documenting trauma surgeon presence in the OR for all trauma operations is in place.

Post-Anesthesia Care Unit (PACU)

3.51 The PACU has the necessary equipment to monitor and resuscitate patients.

3.52 The PACU has qualified nurses available 24/7 as needed during the patient's post anesthesia recovery phase.

3.53 The PACU is covered by a call team from home with documentation by the PIPS program that nurses are available and delays are not occurring.

Radiology

3.54 Conventional radiography and CT are available 24/7.

3.55 MRI capability is available 24/7.

3.56 If there is not an in-house CT technologist, the PIPS program documents response time.

3.57 The center has staff available on-site or via telemedicine within 30 minutes of notification for the interpretation of radiographs 24/7 with an 80% achievement rate.

3.58 Critical information is verbally communicated to the trauma team.

3.59 Diagnostic information is communicated in a written form and in a timely manner.

3.60 Changes in interpretation are monitored by the PIPS program.

3.61 Final reports accurately reflect communications, including changes between preliminary and final interpretations.

3.62 The center has policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to and while in the radiology department.

Intensive Care Unit (ICU)

3.63 The ICU has the necessary equipment to monitor and resuscitate patients.

3.64 There is intracranial pressure monitoring equipment if the center admits neurotrauma patients.

3.65 A qualified nurse is available 24/7 to provide care during the ICU phase.

3.66 The patient/nurse ratio does not exceed 2:1 for critically ill patients in the ICU.

3.67 When a patient is critically ill, there is a mechanism in place to provide prompt availability of ICU physician coverage 24/7.

3.68 The trauma surgeon remains in charge of patients in the ICU.

3.69 The center has a surgical director or co-director for the ICU who is responsible for setting policies and administration related to trauma ICU patients.

Medical Consultants

3.70 Internal medicine specialists are available.

Respiratory Therapy

3.71 There is a respiratory therapist available or on call 24/7.

Laboratory

3.72 Laboratory services are available 24/7 for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate.

3.73 The center has the capability for coagulation studies, blood gases and microbiology.

3.74 The blood bank is capable of blood typing and cross-matching.

3.75 The blood bank has an adequate amount of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, or appropriate coagulation factors to meet the needs of injured patients.

3.76 The center must have a transfusion protocol developed collaboratively between the trauma service and the blood bank.

Nutrition

3.77 Nutrition support services are available.

Social Services

3.78 The hospital has social services.

3.79 The center must screen all trauma patients for alcohol use and provide a brief intervention if appropriate.

Dialysis

3.80 The center has either dialysis capabilities or a transfer agreement with a facility that has dialysis capabilities.

Rehabilitation

3.81 The hospital has physical therapy services.

3.82 The center has either rehabilitation services within its facility or a transfer agreement to a freestanding rehabilitation hospital.

4. Prehospital Trauma Care

4.1 The trauma program participates in prehospital care protocol development.

5. Interhospital Transfer

5.1 The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient.

5.2 There are transfer agreements in place with higher level trauma centers as well as specialty referral centers (e.g. burn, pediatric, and rehabilitation centers).

5.3 A mechanism for direct physician-to-physician contact is present for arranging patient transfer.

5.4 Centers that refer burn patients to a designated burn center must have in place written transfer protocols with a referral burn center.

5.5 There is a plan, approved by the Trauma Medical Director, that determines appropriate transfer of patients with neurologic injury when no neurosurgical coverage is present.

5.6 The center must have guidelines addressing which patients (including pediatric patients) should be transferred and the safe transport of those patients.

6. Process Improvement and Patient Safety (PIPS)

6.1 The center demonstrates a clearly defined PIPS program for the trauma population.

6.2 The PIPS program is supported by a reliable method of internal data collection that consistently gathers valid and objective information necessary to analyze and identify opportunities for improvement.

6.3 System and process issues (such as documentation and communication), clinical care issues (including identification and treatment of immediate life-threatening injuries), and transfer decisions must be reviewed by the PIPS program.

6.4 The trauma program must use clinical practice guidelines, protocols, and algorithms derived from evidence-based validation resources to achieve benchmark goals.

6.5 All process and outcome measures must be documented in a written PIPS plan and updated annually.

6.6 The trauma center demonstrates a clearly defined PIPS program for the trauma population. All process and outcome measures must be documented in a written PIPS plan and updated annually.

6.7 The process of analysis occurs at regular intervals to meet the needs of the program.

6.8 The process of analysis includes multidisciplinary review.

6.9 The process demonstrates problem resolution (loop closure).

6.10 The center is able to separately identify the trauma patient population for review.

6.11 The PIPS program must have audit filters to review and improve pediatric and adult patient care.
6.12 The center uses the registry to support its PIPS program.
6.13 Deaths are categorized as unanticipated mortality with opportunity for improvement, anticipated mortality with opportunity for improvement, or mortality without opportunity for improvement.
6.14 The PIPS program reviews the organ donation rate.
6.15 The PIPS program has defined conditions requiring the surgeon's immediate hospital presence.
6.16 The PIPS program ensures that the PACU has the necessary equipment to monitor and resuscitate patients.
6.17 All Trauma Team Activations must be categorized by the priority of response and quantified by number and percentage.
6.18 The center's PIPS program must work with receiving facilities to provide and obtain feedback on all transferred patients.
6.19 The PIPS program evaluates OR availability and delays when an on-call team is used.
6.20 The PIPS program documents the appropriate timeliness of the arrival of the MRI technologist.
6.21 The availability of the anesthesia services and the absence of delays in airway control or operations are documented in the PIPS program.
6.22 The 80% compliance of the surgeon's presence in the ED is confirmed and monitored by PIPS (30 minutes).
6.23 Programs that admit more than 10% of injured patients to nonsurgical services demonstrate the appropriateness of that practice through the PIPS program.
6.24 The adult trauma center that treats children reviews the care of injured children through the PIPS program.
6.25 In centers with ICUs, transfers to a higher level of care must be reviewed to determine the rationale for transfer, adverse outcomes, and opportunities for improvement.
6.26 If the center has an ICU, the PIPS program must document that timely and appropriate care and coverage are being provided.
6.27 The PIPS program reviews transfers to ensure appropriateness.
6.28 The PIPS program reviews the appropriateness of the decision to transfer or retain major orthopedic trauma.
6.29 There is a performance improvement program that demonstrates appropriate care in the center that treats neurotrauma patients.
6.30 The center must have a policy to notify dispatch and Emergency Medical Services (EMS) agencies when on divert status.
6.31 The center must have a diversion policy and track the occurrence of diversion through the PIPS program.

7. Trauma Program Operational Process Performance Committee (TPOPPC)

7.1 There is a TPOPPC. This multidisciplinary committee addresses, assesses, and corrects global trauma program and system issues. This committee handles process, includes all program-related services, meets regularly, takes and requires attendance of medical staff involved in trauma care, has minutes, and works to correct all overall program deficiencies to continue to optimize patient care.

7.2 There is a TPOPPC with participation from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.

7.3 The TPOPPC is chaired by the Trauma Medical Director.

7.4 Identified problem trends undergo multidisciplinary peer review by the TPOPPC.

7.5 There is documentation reflecting the review of operational issues and, when appropriate, the analysis and proposed corrective actions.

8. Time Sensitive Emergency (TSE) Registry

8.1 Data is submitted to the Idaho TSE Registry (Idaho Trauma Registry). At least 80% of cases must be entered into the registry within 180 days of treatment.

8.2 There is a process in place to verify that TSE Registry data is accurate and valid.

8.3 The trauma program ensures that registry data confidentiality measures are in place.

9. Outreach & Education

9.1 The trauma center is engaged in trauma and injury prevention related public and professional education.

9.2 The hospital provides a mechanism for trauma-related education for nurses involved in trauma care.

10. Prevention

10.1 The center participates in traumatic injury prevention and bases activities on local data. It is recommended to have a fall prevention program, but not required.

10.2 The center has a prevention coordinator with a demonstrated job description and salary support.

10.3 The center demonstrates collaboration with or participation in national, regional, or state injury prevention programs.

11. Disaster Planning and Management

11.1 The center meets the disaster-related requirements of the Joint Commission.

11.2 A trauma surgeon is a member of the center's disaster committee.

11.3 Center drills that test the individual hospital's disaster plan are conducted at least every 6 months.

11.4 The center has a disaster plan described in its Disaster Manual.

12. Organ Procurement

12.1 The center has an established relationship with a recognized Organ Procurement Organization (OPO).

12.2 There are written policies for triggering notification of the OPO.

12.3 The center has written protocols for declaration of brain death.

** External continuing education does not include: in-service, case-based learning; grand rounds; internal trauma symposia; and in-house publications disseminating information gained from a local conference.