



Idaho Time Sensitive Emergency Program

Level III Trauma Center

Application & Resource Tool Kit

DRAFT ONLY
Do not use to apply for designation.

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IDAHO DEPARTMENT OF
HEALTH & WELFARE

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TSE Frequently Asked Questions

Why a TSE program?

The 2014 Idaho Legislature approved and funded a plan to develop a statewide Time Sensitive Emergency (TSE) system of care that addresses three of the top five causes of deaths in Idaho: trauma, stroke, and heart attack. Studies show that organized systems of care improve patient outcomes, reduce the frequency of preventable death, and improve the quality of life of the patient.

How does the TSE program work?

The Idaho Department of Health and Welfare provides oversight and administrative support for the day-to-day operation of the program.

A governor-appointed TSE Council made up of health care providers, EMS agencies, and administrators of hospitals representing both urban and rural populations is responsible for establishing Rules and Standards for the TSE system. The Council is the statewide governing authority of the system.

The state has been divided into six regions. Each of these has a Regional TSE Committee made up of EMS providers, hospital providers and administrators, and public health agencies. The regional committees will be the venue in which a wide variety of work is conducted such as education, technical assistance, coordination, and quality improvement. The Regional TSE Committees will have the ability to establish guidelines that best serve their specific community in addition to providing a feedback loop for EMS and hospital providers.

What guiding principles are the foundation of the TSE system?

- Apply nationally accepted evidence-based practices to time sensitive emergencies;
- Ensure that standards are adaptable to all facilities wishing to participate;
- Ensure that designated centers institute a practiced, systematic approach to time sensitive emergencies;
- Reduce morbidity and mortality from time sensitive emergencies;
- Design an inclusive system for time sensitive emergencies;
- Participation is voluntary; and
- Data are collected and analyzed to measure the effectiveness of the system.

How often does a center need to be verified?

Every three years.

How much does it cost to be verified and designated?

Verification is done once every three years. The on-site survey fee is \$3,000 and must be submitted with the application. Designation is valid for three years. The designation fee may be paid in three annual payments of \$8,000 or in one payment of \$24,000.

Whom do I contact if I have questions about the application process?

Idaho Time Sensitive Emergency Program

P.O. Box 83720

Boise, ID 83720-0036

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<http://tse.idaho.gov/>

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Application Process

To apply for designation as a Level III Trauma Center in Idaho using the ACS:

1. Print and complete the application. Submit one application per facility. A completed application includes:
 - A. Facility and Personnel Profile;
 - B. Certification Statement;
 - C. A copy of the pre-review questionnaire (PRQ) from the ACS; and
 - D. A copy of the ACS site review
2. Get the required signatures on the Certification Statement.
3. Put the application in a binder with labeled, tabbed dividers between each section: Profile, Certification, PRQ, and ACS site review.
4. Mail the completed application to:

Bureau of EMS and Preparedness
Time Sensitive Emergency Program
P.O. Box 83720
Boise, ID 83720-0036

Or for FedEx, UPS, etc.:
2224 E. Old Penitentiary Road
Boise, ID 83712

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TSE Program staff will notify you within 10 business days of receipt of the application and confirm that the application is complete.

Application Process

To apply for designation as a Level III Trauma Center using the State of Idaho for verification:

Complete and print the application. Submit one application per facility. A completed application includes:

- A. Facility and Personnel Profile;
- B. Certification Statement; and
- C. Supporting Documentation

2. Obtain the required signatures on the Certification Statement.

3. Put the application in a binder with labeled, tabbed dividers between each section: Profile, Certification, and Supporting Documentation.

4. Mail the completed application to:

Bureau of EMS and Preparedness
Time Sensitive Emergency Program
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Boise, ID 83720-0036

Or for FedEx, UPS, etc.:
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Application for Level III Trauma Center Designation

A. Hospital and Personnel Profile

Hospital Name:		
Mailing Address:	City:	Zip:
Physical Address:	City:	Zip:
Phone:	County:	
Application Contact and Title:		
Phone:	E-Mail:	

Hospital Administrator/Chief Executive Officer:	
Phone:	E-Mail:
Trauma Program Manager:	
Phone:	E-Mail:
Trauma Medical Director:	
Phone:	E-Mail:
Emergency Department Medical Director:	
Phone:	E-Mail:
Emergency Department Nursing Director:	
Phone:	E-Mail:

B. Certification Statement

I, _____ (CEO/COO), on behalf of _____ (hospital), voluntarily agree to participate in the Idaho Time Sensitive Emergency system as a Level III Trauma Center. We will work with emergency medical services and other hospitals in our area to streamline triage and transport of trauma patients and participate in our Regional Time Sensitive Emergency Committee.

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I certify that:

- A. The information and documentation provided in this application is true and accurate.
- B. The facility meets the State of Idaho criteria to be designated as a Level III Trauma Center.
- C. We will participate in the Idaho TSE Registry; and
- D. We will notify the Time Sensitive Emergency Program Manager immediately if we are unable to provide the level of trauma service we have committed to in this application.

Chair, Governing Entity (Hospital Board)

Date

Chief Executive Officer

Date

Trauma Program Manager

Date

Emergency Department Medical Director

Date

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.

In order to assist Idaho facilities seeking TSE designation, the TSE Program has compiled the following lists and/or resources. Please note that the items contained in this document are provided for informational or demonstration purposes only. The TSE Council does not require facilities to utilize these specific resources, nor does the TSE Program recommend any one over another on this list. These resources are listed solely as a courtesy to facilities seeking TSE designation.

1. Trauma Systems

1.1 There is sufficient involvement by the hospital trauma program staff in state and regional trauma system planning, development, and operation.

Requirement: <input type="radio"/> Documentation of participation in at least 50% of regional TSE Committee meetings.	Resources: http://tse.idaho.gov/
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2. Description of Trauma Centers and Their Roles in a Trauma System

2.1 All trauma facilities are on the same campus.

Requirement: <input type="radio"/> Supporting documentation.

2.2 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 Performance Improvement and Patient Safety (PIPS) program and hospital policy.

Requirement: <input type="radio"/> Supporting documentation.

2.3 The trauma surgeon is on site in the Emergency Department (ED) within 30 minutes of notification 24/7 with an achievement rate of 80% as monitored by the PIPS program.

Requirement: <input type="radio"/> Supporting documentation.

2.4 The center has general surgical coverage 24/7.

Requirement: <input type="radio"/> Copy of call schedule.
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2.5 The trauma team's 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.

Requirements:

- Documentation supporting the trauma surgeons' response to trauma activations.
- CME documentation for each trauma surgeon.
- Documentation supporting the trauma surgeons' participation in PIPS activities.

2.6 The center has well-defined transfer protocols.

Requirement:

- Copy of transfer protocols.

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

Requirement:

- Copy of credentials.

2.8 The adult trauma center that treats more than 100 injured children annually has a pediatric ED area, a pediatric intensive care area, appropriate resuscitation equipment, and pediatric-specific trauma PIPS program.

Requirements:

- Proof of pediatric ED area.
- Proof of pediatric ICU area.
- Pediatric equipment list.
- Documentation supporting the existence of a pediatric-specific trauma PIPS program.

2.9 The adult trauma center that treats children reviews the care of injured children through the PIPS program.

Requirement:

- Copies of pediatric PIPS minutes from previous 12-month period.

3. Prehospital Trauma Care

3.1 The trauma director is involved in the development of the trauma center's bypass protocol.

Requirement:

- Copy of bypass protocol.

Sample:

See page 30.

3.2 The trauma surgeon on call is involved in the decisions regarding bypass.

Requirement:

- Copy of bypass protocol.

Sample:

See page 30.

3.3 The trauma program participates in prehospital care protocol development and the PIPS program.

Requirement:

- Copy of PIPS prehospital care protocol.

4. Interhospital Transfer

4.1 A protocol for direct physician-to-physician contact is present for arranging patient transfer.

Requirement:

- Copy of physician-to-physician contact protocol.

4.2 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.

Requirement:

- Copy of transfer protocol.

4.3 Trauma centers that refer burn patients to a designated burn center must have in place written transfer protocols with the referral burn center.

Requirement:

- Copy of burn center referral protocol or agreement.

5. Hospital Organization and the Trauma Program

5.1 The Trauma Program Operational Process Performance Committee (TPOPPC) continuously evaluates its process and outcomes to ensure optimal and timely care.

Requirement:

- Copies of TPOPPC minutes from previous 12-month period.

5.2 The Trauma Medical Director is a board-certified surgeon or an American College of Surgeons (ACS) Fellow.

Requirement:

- Copy of board-certification; or
- ACS Fellow documentation.

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5.3 The Trauma Medical Director participates in trauma call.

Requirement:

- Copies of the trauma call schedules from previous 12-month period.

5.4 The Trauma Medical Director is current in Advanced Trauma Life Support (ATLS).

Requirement:

- Copy of current ATLS certification card.

Resources:.

http://web20.facs.org/atls_cr/ATLS_Course_Search.cfm

5.5 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.

Requirement:

- Documentation indicating Trauma Medical Director's authorities.

5.6 The criteria for graded activation is clearly defined by the trauma center and continuously evaluated by the PIPS program.

Requirements:

- Copy of the graded activation criteria.
- Documentation supporting PIPS program evaluation.

Resources:

See page 32.

5.7 Programs that admit more than 10% of injured patients to nonsurgical services demonstrate the appropriateness of that practice through the PIPS process.

Requirement:

- Documentation supporting the PIPS evaluation of this practice.

5.8 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.

Requirement:

- Documentation supporting this structure.

5.9 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.

Requirement:

- Supporting documentation.

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5.10 There is a Trauma Program Operational Process Performance Committee chaired by the trauma medical director or designee, with representatives from appropriate subspecialty services.

Requirement:

- Supporting documentation.

5.11 The general surgery core group is adequately defined by the trauma medical director.

Requirement:

- Documentation defining general surgery core group.

5.12 The general surgery core group takes at least 60% of the total trauma call hours each month.

Requirements:

- Copy of the general surgery call schedule.
- Highlight the general surgery core physicians.

5.13 The general surgery core group attends a minimum of 50% of the Trauma Program Operational Process Performance Committee meetings.

Requirements:

- Copy of minutes from 12 months of TPOPPC meetings.
- A list of general surgery core physicians.

5.14 The trauma director ensures and documents dissemination of information and findings from the Trauma Program Operational Process Performance Committee meetings to the noncore surgeons on the trauma team.

Requirement:

- Documentation supporting the dissemination information and findings.

6. Clinical Functions: General Surgery

6.1 The Trauma Medical Director has the responsibility and authority to ensure compliance with verification requirements.

Requirement:

- Documentation supporting the Trauma Medical Director's responsibility and authority.

6.2 The trauma surgeon has privileges in general surgery.

Requirement:

- Copy of privileges for each trauma surgeon.

6.3 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.

Requirement:

- PIPS documentation supporting the response time and rate are met.

6.4 The criteria for the highest level of activation is clearly defined and evaluated by the PIPS program.

Requirements:

- Copy of criteria for the highest level of trauma activation.
- Copy of PIPS protocol pertaining to evaluation of trauma activation level.

Resources:

See page 32.

6.5 A mechanism for documenting trauma surgeon presence in the operating room for all trauma operations is in place.

Requirement:

- Supporting documentation.

6.6 There is a Trauma Program Operational Process Performance Committee (TPOPPC) with participation from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.

Requirement:

- List of participants in the TPOPPC, including their job titles.

6.7 All general surgeons on the trauma team have successfully completed the ATLS course at least once.

Requirement:

- Copy of ATLS certification card for each general surgeon.

7. Clinical Functions: Emergency Medicine

7.1 The ED has a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.

Requirement:

- Supporting documentation.

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

Requirement:

- Supporting documentation.

7.3 In facilities that have an emergency medicine residency training program, supervision is provided by an in-house attending emergency physician 24/7.

Requirement:

- Copy of protocol regarding resident supervision.

7.4 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the trauma medical director.

Requirement:

- Supporting documentation.

7.5 A representative from the ED participates in the prehospital PIPS program.	
Requirements:	
<input type="radio"/> Prehospital PIPS minutes from at least 2 meetings from prior 12-month period. <input type="radio"/> Highlight the name of the ED representative.	

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7.6 A designated emergency physician is available to the trauma medical director for PIPS issues that occur in the ED.	
Requirement:	
<input type="radio"/> Supporting documentation.	

7.7 An emergency physician participates in the trauma PIPS program and the Trauma Program Operational Process Performance Committee (TPOPPC).	
Requirement:	
<input type="radio"/> Supporting documentation.	

7.8 The emergency medicine representative or designee to the Trauma Program Operational Process Performance Committee attends a minimum of 50% of these meetings.	
Requirements:	
<input type="radio"/> TPOPPC minutes from the previous 12-month period. <input type="radio"/> Highlight the name of the ED representative.	

7.9 All emergency physicians have successfully completed the ATLS course at least once.	
Requirement:	Resources:
<input type="radio"/> Copy of ATLS certification cards.	http://web20.facs.org/atls_cr/ATLS_Course_Search.cfm

7.10 Physicians who are not board-certified in emergency medicine who work in the ED are current in ATLS.	
Requirement for each ED physician:	Resources:
<input type="radio"/> Copy of board-certification; or <input type="radio"/> Copy of current ATLS certification card.	http://web20.facs.org/atls_cr/ATLS_Course_Search.cfm

8. Clinical Functions: Neurosurgery

8.1 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.

Requirement:

- Copy of plan or protocol when no neurosurgical coverage is present.

8.2 There is a performance improvement program that demonstrates appropriate care in the facility that treats neurotrauma patients.

Requirement:

- Supporting documentation.

8.3 There are transfer protocols in place with appropriate Level I and II Trauma Centers.

Requirement:

- Copy of transfer protocols.

9. Clinical Functions: Orthopedic Surgery

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

Requirement:

- Supporting documentation.

9.2 An orthopedic surgeon is designated to and participates in the PIPS program and Trauma Program Operational Process Performance Committee. The orthopedic surgeon attends a minimum of 50% of these meetings.

Requirement:

- Copy of PIPS program minutes from the previous 12-month period.
- Copy of TPOPPC minutes from the previous 12-month period.
- On both, highlight the name of the designated orthopedic surgeon.

9.3 The PIPS process reviews the appropriateness of the decision to transfer or retain major orthopedic trauma.

Requirement:

- PIPS protocol pertaining to evaluation of trauma patient transfers.

9.4 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.

Requirement:

- Documentation supporting the response time and rate are met.

9.5 The orthopedic surgeon has privileges in general orthopedic surgery.

Requirement:

- Copy of privileges for each orthopedic surgeon.

11. Collaborative Clinical Services

Anesthesia

11.1 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.

Requirement:

- PIPS documentation supporting the response time and rate are met.

11.2 An anesthesiologist is designated to and participates in the PIPS program and Trauma Program Operational Process Performance Committee. The anesthesiologist attends a minimum of 50% of these meetings.

Requirements:

- Copy of PIPS program minutes from the previous 12-month period.
- Copy of TPOPPC minutes from the previous 12-month period.
- On both, highlight the name of the designated anesthesiologist.

11.3 Anesthesia services are available 24/7 and present for all operations.

Requirement:

- Supporting documentation.

11.4 In trauma centers without in-house anesthesia services, protocols are in place to ensure the timely arrival at the bedside of the anesthesia provider.

Requirement:

- Copy of protocol pertaining to the timely arrival of the anesthesia provider.

11.5 In a center without anesthesia services, there is documentation of the presence of physicians skilled in emergency airway management.

Requirement:

- Supporting documentation.

Operating Room

11.6 The operating room is adequately staffed and readily available.

Requirement:

- Supporting documentation.

11.7 The PIPS program evaluates the operating room (OR) availability and delays when an on-call team is used.

Requirement:

- Copy of the PIPS program evaluation of the OR.

11.8 The operating room has the essential equipment listed in Chapter 11 of Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006.

Requirement:	Resources:
<ul style="list-style-type: none"><input type="radio"/> Supporting documentation.	See list on page 33

Post Anesthesia Care Unit (PACU)

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

Requirement:

- Copy of staffing matrix and on-call schedule.

11.10 If the PACU is covered by a call team, there is documentation by the PIPS program that nurses are available and delays are not occurring.

Requirement:

- Supporting documentation.

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

Requirement:

- Supporting documentation.

Resources:

See list on page 34.

11.12 The PIPS process ensures that the PACU has the necessary equipment to monitor and resuscitate patients.

Requirement:

- Supporting documentation.

Resources:

See list on page 34.

Radiology

11.13 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.

Requirement:

- Documentation supporting the response time and rate are met.

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

Requirement:

- Copy of protocol for communication of diagnostic information regarding trauma patients.

11.15 Critical information is verbally communicated to the trauma team.

Requirement:

- Copy of protocol for communication of critical radiological information.

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

Requirement:

- To be evaluated as part of chart review during site survey.

11.17 Changes in interpretation are monitored by the PIPS program.

Requirement:

- Supporting documentation.

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

Requirement:

- Copy of policy regarding accompaniment of trauma patients to and in radiology.

11.19 Conventional radiography and CT are available 24/7.

Requirement:

- Copy of staffing matrix for CT and conventional radiology.

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

Requirement:

- Copy of PIPS documentation from previous 3 months.

Critical Care

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

Requirement:

- Job description for surgical director or co-director of the ICU.

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

Requirement:

- Copy of policy supporting authority of trauma surgeon in the ICU.

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

Requirement:

- Copy of ICU physician call schedules for previous 3 months.

11.24 The surgical director or surgical co-director is a surgeon, is credentialed by the hospital to care for ICU patients, and participates in the PIPS program.

Requirements:

- Copy of credentials of the of the ICU surgical director or co-director.
- The PIPS program meeting minutes from the previous 12-month period.
- Highlight the director or co-directors name in the minutes.

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

Requirement:

- Supporting documentation.

11.26 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the ICU team.

Requirement:

- To be evaluated as part of chart review during site survey.

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

Requirement:

- Supporting documentation.

11.28 The PIPS program reviews admissions and transfers to ensure appropriateness.

Requirement:

- Copy of PIPS reviews of admissions and transfers for previous 3 months.

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

Requirement:

- Copy of ICU staffing matrix.

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

Requirement:

- Copy of ICU staffing policy regarding trauma patients.

11.31 The ICU has the necessary equipment to monitor and resuscitate patients.	
Requirement: <input type="radio"/> Supporting documentation.	Resources: See list on page 35.

11.32 There is intracranial pressure monitoring equipment in a center that admits neurotrauma patients.	
Requirement: <input type="radio"/> Supporting documentation.	

Other Surgical Specialists	
11.33 The center has orthopedic surgery available.	
Requirement: <input type="radio"/> Copy of orthopedic surgeon call schedule for previous 3 months.	

Medical Consultants	
11.34 Internal medicine specialists are available.	
Requirement: <input type="radio"/> Copy of orthopedic surgeon call schedule for previous 3 months.	

11.35 There is a respiratory therapist available or on call 24/7.	
Requirement: <input type="radio"/> Copy of policy regarding respiratory therapy operation.	

11.36 Laboratory services are available 24/7 for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate.	
Requirement: <input type="radio"/> Copy of policy regarding lab operation.	

11.37 The blood bank is capable of blood typing and cross-matching.	
Requirement: <input type="radio"/> Copy of policy regarding blood bank operation.	

11.38 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.

- Requirement:
- Policy regarding blood bank inventory.

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

- Requirements:
- Copy of policy regarding availability of coagulation studies.
 - Copy of policy regarding availability of blood gases.
 - Copy of policy regarding availability of microbiology.

12. Rehabilitation

12.1 The hospital has physical therapy services.

- Requirement:
- Copy of policy regarding physical therapy services operation.

12.2 The hospital has social services.

- Requirement:
- Copy of policy regarding social services operation.

15. Trauma Registry

15.1 Trauma registry data are collected, analyzed, and used to support the PIPS program.

- Requirement:
- Copy of PIPS documentation supporting registry data analysis.

15.2 Data are submitted to the Idaho TSE Registry. At least 80% of trauma cases must be entered into the registry within 180 days of treatment.

- | | |
|--|--|
| <p>Requirement:</p> <ul style="list-style-type: none"> <input type="radio"/> Letter from the Idaho Trauma Registry confirming compliance. | <p>Resources:</p> <p>http://www.idahotrauma.org/</p> |
|--|--|

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

- Requirement:
- Copy of policy regarding confidentiality of trauma data.

15.4 There are strategies for monitoring data validity for the trauma registry.

Requirement:

- Documentation letter from the Idaho Trauma Registry confirming validity.

16. Performance Improvement and Patient Safety (PIPS)

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

Requirement:

- Copy of PIPS minutes from previous 12 months.

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

Requirement:

- Supporting documentation.

16.3 The process of analysis includes multidisciplinary review.

Requirement:

- Supporting documentation.

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

Requirement:

- Supporting documentation.

16.5 The results of analysis define corrective strategies.

Requirement:

- Supporting documentation.

16.6 The results of analysis and corrective strategies are documented.

Requirement:

- Copies of analysis and corrective strategies from previous 12 months.

16.7 The trauma program is empowered to address issues that involve multiple disciplines.

Requirement:

- Supporting documentation.

16.8 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.

Requirement:

- Trauma program organizational chart.

16.9 The trauma program has a medical director with the authority and administrative support to lead the program.

Requirement:

- Trauma Medical Director job description.

16.10 The Trauma Medical Director has sufficient authority to set qualifications for the trauma service members.

Requirement:

- Copy of Trauma Medical Director job description; or
- Other supporting documentation.

16.11 The Trauma Medical Director has the authority to recommend changes for the trauma team based on performance review.

Requirement:

- Supporting documentation.

16.12 Identified problem trends undergo multidisciplinary peer review by the Trauma Program Operational Process Performance Committee.

Requirement:

- Copy of minutes from TPOPPC meetings from previous 12 months.

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

Requirement:

- Copy of process used to identify trauma patients for review.

16.14 There is a process to address trauma program operational issues.

Requirement:

- Copy of process used to address trauma program operational issues.

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

Requirement:

- Copy of tool(s) used to evaluate the trauma program.

16.16 In circumstances when attendance is not mandated (noncore members), the trauma medical director ensures and documents dissemination of information from the Trauma Program Operational Process Performance Committee.

Requirement:

- Copy of process for dissemination of information.

16.17 Evidence of appropriate participation and acceptable attendance is documented in the PIPS process.

Requirement:

- PIPS meeting minutes from previous 12-month period.

16.18 Deaths are systematically categorized as preventable, non-preventable, or potentially preventable.

Requirement:

- Copy of policy regarding categorization of deaths.

17. Outreach and Education

17.1 The trauma center is engaged in public and professional education.

Requirement:

- Record of outreach/education opportunities.

17.2 The trauma center is involved in injury prevention activities, including annual public education activities.

Requirement:

- Record of injury prevention activities.

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

Requirement:

- Copy of policy regarding trauma education for nurses involved in trauma care.

18. Prevention

18.1 The trauma center participates in injury prevention.

Requirements:

Supporting documentation.

20. Disaster Planning and Management

19.1 The hospital meets the disaster-related requirements of the Joint Commission.

Requirement:

- Supporting documentation.

Resources:.

http://www.jointcommission.org/assets/1/18/emergency_preparedness.pdf

20.2 A trauma surgeon is a member of the hospital's disaster committee.

Requirement:

- Record of trauma surgeon membership on the disaster committee.

20.3 Hospital drills that test the individual hospital's disaster plan are conducted at least every six months.

Requirement:

- Records of disaster plan drills from previous 12-month period.

20.4 The trauma center has a hospital disaster plan described in the hospital disaster manual.

Requirement:

- Summary of the disaster plan; or
- Copy of the Disaster Manual.

Resources:

<https://www.acep.org/WorkArea/DownloadAsset.aspx?id=45263>

21. Organ Procurement Activities

21.1 The trauma center has an established relationship with a recognized organ procurement organization (OPO).

Required documentation:

- Documentation of relationship.

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

Requirement:

- Copy of policy for OPO notification.

21.3 The PIPS process reviews the organ donation rate.

Requirement:

- Documentation of PIPS review of organ donation rate.

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

Requirement:

- Copy of protocol for declaration of brain death.

Sample:

See pages 36 39.

DRAFT ONLY
Do not use to apply for designation.

Trauma Diversion Policy

Purpose:

Occasions may arise when one or more essential hospital resources are functioning at maximum capacity or otherwise unavailable and it is in the best interests of the trauma patient to be directed to an alternative facility for care.

Policy:

The need to go on “trauma divert” is a rare situation but might occur in the following circumstances:

- The emergency department is saturated; demand for critical patient care resources exceeds availability.
- Emergency department resources are fully committed due to an external disaster/multiple-casualty event.
- Emergency department resources are unavailable due to an internal disaster or catastrophic mechanical failure.

In such rare cases, the emergency department physician may make the decision to divert trauma patients for a short period of time. The need to remain on divert status should be reviewed at least hourly to provide for the shortest possible time on divert.

The diversion of trauma patients only pertains to incoming ambulance patients and not to walk-in patients. A patient incoming via ambulance while on “trauma divert” will be accepted if the EMS provider and monitoring physician determine that the patient is experiencing a condition such that transport to the next closest appropriate trauma hospital could reasonably result in increased morbidity or death. “Trauma divert” status is a request to EMS personnel to transport the patient to another facility. The patient or EMS personnel may decline the request to divert provided they have been properly apprised of the potential for delayed treatment affecting the care of the patient.

Ambulance patients who have arrived on hospital property will be admitted to the emergency department and evaluated by a physician regardless of the hospital’s diversion status.

Procedure:

Going on divert:

1. The emergency department physician will decide on the need to go on “trauma divert.” The physician will notify the emergency department charge nurse.
2. The charge nurse notifies the following of trauma divert status:
 - a. Emergency department nursing staff
 - b. EMS dispatch center(s) (e.g. sheriff departments); request EMS personnel to call hospital early with patient information
 - b. [NEIGHBORING HOSPITAL(S)]
3. The emergency department charge nurse begins a “Trauma Divert Tracking Log.”

When contacted by EMS with information regarding a seriously injured trauma patient, the emergency department staff person taking report notifies the EMS crew that the hospital is on trauma divert and immediately puts the crew in contact with the emergency department physician. The physician will determine if the patient is to be seen in the emergency department or diverted to a nearby facility. The decision whether or not to divert must be accomplished very quickly in order to minimize the amount of time the patient spends in transit.

Going off divert:

1. The emergency physician who initiated the closure must:
 - a. Continuously evaluate the need to remain on trauma divert.
 - b. Make the decision as to when the hospital is no longer on trauma divert.
 - c. Notify the emergency department charge nurse when no longer on trauma divert.
2. The charge nurse notifies:
 - a. Emergency department nursing staff
 - b. EMS dispatch center
 - c. [NEIGHBORING HOSPITAL(S)]
3. The emergency department charge nurse completes the "Trauma Divert Tracking Log" and forwards it to the trauma program manager.

Trauma Triage Guidelines

These guidelines were approved for statewide use by the Idaho Time Sensitive Emergency Council on July 14, 2015.

Priority 1

- SBP of 90 or less, respiratory rate <10 or >30
- Tachycardia HR >130 AND meet Priority 2 criteria
- Age specific hypotension in children
 - <70mmHg + 2 x age)
 - HR > 200 or < 60
- Respiratory compromise/obstruction
- Intubation
- Inter-facility transfer patients receiving blood to maintain vital signs
- GCS 8 or less with mechanism attributed to trauma
- Major limb amputation
- Pregnancy >20 weeks gestation with leaking fluid or bleeding or abdominal pain that also meets Priority 3 criteria
- Open skull fracture

Priority 2

- GCS 9 to 13
- Chest tube/ needle thoracotomy
- Pelvic fracture (suspected)
- Two obvious long bone fractures (femur/ humerus)
- Flail chest
- Near drowning
- Ejection from ENCLOSED vehicle
- Burns > 20% BSA OR involvement of face, airway, hands, or genitalia
- Sensory deficit of an extremity

Priority 3

- Death of same car occupant
- Extrication time > 20 minutes
- Fall 2 x patient's height
- Auto vs. bike OR auto vs. pedestrian
- Non-enclosed wheeled or mechanized transport > 20 mph
- Horse ejection or rollover
- 12" intrusion into occupant space or vehicle
- "Star" any window or windshield
- Rollover
- Broken/bent steering wheel
- Trauma mechanism w/ change in LOC
- Amputation of one or more digits
- 10-20% TBSA (second or third degree)

Essential Operating Room Equipment

Taken from *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006.*

- Rapid infuser
- Thermal control equipment for patients
- Resuscitation fluids
- Intraoperative radiologic capabilities
- Equipment for fracture fixation
- Equipment for endoscopic evaluation (bronchoscopy and gastrointestinal endoscopy)

Essential Postanesthesia Care Unit Equipment

Taken from *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006.*

- Pulse oximetry
- End-tidal carbon dioxide detection
- Arterial pressure monitoring
- Pulmonary artery catheterization
- Patient rewarming

Essential Intensive Care Unit Equipment

Taken from *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006.*

- Pulse oximetry
- End-tidal carbon dioxide detection
- Arterial pressure monitoring
- Pulmonary artery catheterization
- Patient rewarming



Title: Determining Brain Death

Policy Statement: Criteria for determining brain death shall be established in accordance with accepted medical standards.

Procedure:

I. Definition of Brain Death:

- A. Brain death is the absence of brain function when the proximate cause is known, can be demonstrated to be irreversible, and demonstrated by repetitive standardized criteria.
- B. Prerequisite: Acute Central Nervous System (CNS) catastrophe and involved clinical situations which can be documented by clinical and neuroimaging testing.
- C. Exclusion Criteria:
 - 1. Core temperature less than or equal to 95° Fahrenheit or 32° Celsius.
 - 2. Reversible electrolyte, metabolic or endocrine disorder.
 - 3. Drug overdose or therapeutic mean substance intoxication or poisoning:
 - a) Sub-therapeutic barbiturate level is acceptable.
 - b) Discontinue all sedation and neuromuscular blockade.

II. Procedure for Brain Death Examination:

- A. The three cardinal findings in brain death are:
 - 1. Coma or unresponsiveness (see Appendix A),
 - 2. Absence of brain stem function (see Appendix B), and
 - a) No pupillary reflex.
 - b) No facial sensation and facial motor response.
 - c) No ocular movement
 - d) No oculovestibular reflex (caloric)
 - e) No gag reflex
 - f) No integrated motor response to pain. No localizing, withdrawal, extensor posturing, flexor posturing.
 - 3. Apnea (see Appendix C).
- B. Brain Death Determination
 - 1. Must be done in the presence of a physician.
 - 2. Results will be recorded in the progress notes by documenting the supporting evidence and pronouncing brain death.
 - 3. In some instances, the test may need to be repeated at 12, 24, and 48 hours.

4. Following physician declaration of brain death the clinical coordinator should be notified to determine if the patient meets criteria for coroner notification. Such notification should occur at time of brain death determination rather than at the time of cardiac death.

C. Pediatric Brain Death

1. The same excluding criteria as for adults will be used for patients less than 14 years and less than 120 pounds.
2. Special instructions for individualized pediatric apnea tests are noted in Appendix D.

III. Appendix A: Coma or Unresponsiveness:

- A. No spontaneous movement, eye opening or responses after commands.
- B. No movement elicited by painful stimuli, other than spinal cord reflex movements.
- C. Note:
 1. Deep tendon reflexes are spinal cord reflexes.
 2. Shivering, goose bumps, arm movements, reaching of the hands toward the neck, arching of the back, forced exhalation, and thoracic respiratory-like movements are possible after brain death and are likely release phenomena of the spinal cord including the upper cervical cord.

IV. Appendix B: Absence of Brain Stem Function:

- A. No pupillary reflex.
 1. Pupils are fixed and mid position (4-9 mm).
 2. No change after shining a strong light in each eye sequentially in a dark room.
- B. Facial sensation and facial motor response.
 1. No corneal reflex to touch with a sterile cotton swab or tissue. Must touch the cornea and not the conjunctiva.
 2. No grimacing to deep pressure on nail bed, supraorbital ridge or TM joint.
- C. Ocular movement.
 1. No oculocephalic reflex (doll's eyes) (tested only if no c-spine instability).
 2. No eye movement in response to turning of head side to side at 30° elevation.
- D. No oculovestibular reflex (caloric).
 1. No eye movements within three minutes after irrigating each tympanic membrane sequentially with 50 ml iced water for 45-60 seconds.
 2. Allow five minutes between testing on each side. Head of supine patient is elevated 30°.
 3. Remove cerumen. Tympanic membranes must be intact.
- E. No gag reflex. No retching or movement of the uvula after touching the back of pharynx or moving the endotracheal tube.
- F. No integrated motor response to pain. No localizing, withdrawal, extensor posturing, flexor posturing.

V. Appendix C: Apnea Testing:

A. To reduce the incidence of barotrauma:

1. Oxygen catheter should be no larger than 50% of the inner diameter of the artificial airway to prevent excessive back pressure.
2. Oxygen flow should be reduced to 4 LPM if the artificial airway is smaller than a size 6.5.

B. Done with patient under direct physician visualization:

1. Verify patient's body temperature is greater than 95° Fahrenheit.
2. Verify levels of central nervous system depressants/neuromuscular blockers.
3. Oxygenate the patient for at least ten (10) minutes with 100% FiO₂.
4. Adjust ventilator for pCO₂ in the normal range.
 - a) If the patient is chronically hypercarbic, then adjust the ventilator to the normal pH.
 - b) In this case, it is best to obtain a confirmatory test.
5. Obtain a baseline ABG.
6. Disconnect the ventilator.
7. Place oxygen catheter down endotracheal tube or trach at six liters/minute.
8. Observe closely for respiratory effort.
9. Monitor heart rate, heart rhythm, and blood pressure continuously.
10. Document vital signs and observations every two to three minutes.
11. Draw an ABG at six to ten (6-10) minutes.
12. Discontinue test when:
 - a) Signs of respiratory effort, cardiac instability, or hypotension are observed.
 - b) pCO₂ of 60 torr is reached.
 - c) Patient has been off ventilator for ten (10) minutes.

C. Interpretation of the apnea test:

1. If respiratory movements are absent and the PaCO₂ is greater than or equal to 60 mm/Hg, and greater than or equal to 20 mm/Hg rise above the preapnea test level, the apnea test is positive and supports the diagnosis of brain death. (What if the PaCO₂ is less than 60 off vent?)
2. If respiratory movements are observed, the apnea test is negative and test should be repeated.
3. If the ventilator is reconnected early but the PaCO₂ is greater than or equal to 60 mm/Hg or greater than or equal to 20 mm/Hg above baseline, the apnea test is positive and supports the diagnosis of brain death.
4. If the ventilator is reconnected early but the PaCO₂ is less than 60 mm/Hg and less than 20 mm/Hg above baseline, then the result is indeterminate and an

additional confirmatory test can be considered.

D. In some equivocal cases cerebral blood flow testing may be an adjunct.

1. Demonstration of absence of intracranial circulation by angiographic contrast or radioisotopic flow studies.
2. Somatosensory evoked potential with bilateral absence of N20-P22 response with median nerve stimulation.
3. Demonstration of absence of cerebrovascular blood flow following MRI/MRA imaging.

VI. Appendix D: Pediatric Brain Death – Special Instructions:

- A. Set appointment time when the treatment team can be present at the bedside under the direction of the Pediatric Neurologist team leader.
- B. Ensure and document that patient is normothermic and not under the influence of medications which suppress respirations.
- C. Pre-oxygenate the patient with 100% FiO₂ for fifteen to twenty (15-20) minutes.
- D. Adjust ventilator rate so that the patient's starting pCO₂ is between 35-40 mm/Hg per TcPCO₂ monitor.
- E. After completion of hyperoxygenation and achievement of TcPCO₂ stabilization, draw ABG and ensure that the gas levels correlate with the bedside TcPCO₂ monitor.
- F. Turn the ventilator to CPAP mode or CPAP level specified by the physician.
- G. Chart the patient's vital signs, SpO₂, TcCO₂ and independent respiratory efforts at one (1), three (3), five (5), seven (7), and ten (10) minute test periods.
- H. Draw a posttest ABG.
- I. Reinstate mechanical ventilation per physician order.

Resources:

- Guidelines for the determination of death; report of the Medical Consultants on the Diagnosis of Death to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. JAMA 1981; 246:2184-2186.
- Practice parameters for determining brain death in adults (Summary statement). Quality Standards Subcommittee of the American Academy of Neurology. Neurology 1995; 45:1012-1014.
- Guidelines for the determination of brain death in children. Task Force for the Determination of Brain Death in Children. Pediatric Neurology 1987; 3:242-243.
- Current concepts: The diagnosis of brain death. The New England Journal of Medicine 2001; 344(16): 1215-1221.
- Practice Parameters: Determining Brain Death in Adults. Neurology 1995;45:1012-1014.
- Sever Brain Injury to Neurological Determination of Death: A Canadian Forum. Canadian council for Donation and Transplantation, April 9-11, 2003, Vancouver, British Columbia.

Additional Resources

Links to Additional Resources

American Burn Association: www.ameriburn.org

American College of Surgeons – Committee on Trauma: <http://facs.org/trauma/index.html>

American Trauma Society: www.amtrauma.org

Association for the Advancement of Automotive Medicine: <http://aaam.org/>

Centers for Disease Control & Prevention, Guidelines for the Field Triage for the Injured Patient: <http://www.cdc.gov/FieldTriage/>

Eastern Association for the Surgery of Trauma: <http://www.east.org/resources/treatment-guidelines/triage-of-the-trauma-patient>

Emergency Nurses Association: www.ena.org

Resources for the Optimal Care of the Injured Patient 2006:

<https://web4.facs.org/ebusiness/ProductCatalog/ProductCategory.aspx?id=26>

Society of Trauma Nurses: <http://www.traumanurses.org/>