

Policy Number: **CM T-28**

Approved by: **Executive Leadership Team**

Issue Date: **09/1999**

Applies to: **Downtown**

Value(s): *Respect, Integrity, Innovation*

Page(s): 1 of 5

Trauma System Activation – Trauma Code Criteria

Review Date: 02/26/2018	Change Description:
Revised Date: 02/26/2018	Change Description: Updated procedure to include SPOK mobile down procedure; no changes to policy

Applies to:

Physicians (MD/DO) and nurses (RN) and other staff involved in the care of trauma patients.

Policy:

The Trauma System is the comprehensive trauma team and resources necessary to care for our trauma patients. This comprehensive team includes but is not limited to: Emergency Department, EMS, trauma surgery, radiology, Adult/Pediatric OR, SICU/PICU, inpatient floors and acute rehabilitation. In order for the Trauma System to function optimally, early activation of the system is necessary. Trauma codes will be activated according to the trauma code criteria by the Emergency Department Attending or ED RN in accordance with Procedure PROC CM T-28A. The trauma activation or consult will be documented in Epic by ED Registration. The trauma level activated cannot be downgraded once activated. It can be upgraded based on discretion.

Process: See Procedure PROC CM T-28A

Criteria:

Adult Trauma Code Criteria – Age 15 - 69
Level I Trauma Criteria
<p><u>Airway</u></p> <ul style="list-style-type: none"> In need of emergent airway Intubated in the field
<p><u>Breathing</u></p> <ul style="list-style-type: none"> Ongoing respiratory compromise Respiratory arrest
<p><u>Circulation</u></p> <ul style="list-style-type: none"> SBP < 90 Clinical Signs of Shock
<p><u>Neurological</u></p> <ul style="list-style-type: none"> GCS <=9 Open skull fracture
<p><u>Anatomic Diagnosis</u></p> <ul style="list-style-type: none"> Penetrating trauma to head, neck, torso, groin or proximal to knee or elbow (unless obvious or known superficial injury only) Partial or complete amputation of major limb (not isolated hand/finger injury)
<p><u>May upgrade any level per ED Physician Discretion</u></p>

Adult Trauma Code Criteria – Age 15 – 69 (continued)**Level I Trauma Criteria (continued)****Pregnant Trauma Patients**

>23 weeks (Fundus palpable at or above umbilicus) Meeting Level I or Level II criteria

Burns

- Any burn patient who also meets level I criteria
- Inhalation with unsecured airway

May upgrade any level per ED Physician Discretion**Geriatric Level I Trauma Criteria – Age >70****Airway**

- In need of emergent airway
- Intubated in the field

Breathing

- Ongoing respiratory compromise
- Respiratory Arrest

Circulation

- SBP <100
- Clinical Signs of Shock

Neurological

- GCS ≤9
- Open skull fracture

Anatomic

- Penetrating trauma to head, neck, torso, groin or proximal to knee or elbow (unless obvious or known superficial injury only)
- Partial or complete amputation of major limb (not isolated hand/finger injury)

Mechanism

- High risk MVC (death of another occupant, intrusion of 12 inches in passenger compartment).

May upgrade any level per ED physicians discretion**Level II Trauma Criteria****Trauma Patients who meet any of the following and do not meet any Level I Criteria:**

- Intubated inter-facility, otherwise stable, who also doesn't meet any level 1 criteria
- Depressed skull fracture
- Fall from height (> 15 ft)
- Severe maxillofacial trauma
- Pedestrian struck – thrown, run over with significant impact (>20 mph)
- Motorcycle, ATV or snowmobile crash with severe injury
- Suspected or actual unstable pelvis without hypotension
- Blast injury
- Suspected or actual spinal cord injury
- Burns with greater than or equal to 20% TBSA
- Inhalation injury with secure airway
- Crush injuries

May upgrade any level per ED Physician Discretion

Adult Trauma Code Criteria – Age 15 – 69 (continued)

Level III Trauma Criteria (Consult)

Trauma Patients with any of the following and who *do not meet* Level I or Level II:

- Prolonged extrication time
- Patient with traumatic mechanism of injury who will be admitted to any service Patient over 70 years of age with traumatic mechanism of injury who will be admitted
- Transfer from another hospital
- High risk MVC (death of another occupant, intrusion of 12 inches in passenger compartment, ejected from another vehicle, rollover)
- Fall in patient taking anticoagulant

May upgrade any level per ED Physician discretion

Pediatric Trauma Code Criteria- Age 0 - 14

Level I Trauma Criteria

Airway

- Intubated/assisted ventilation from the scene or transferred from another facility

Breathing

- Respiratory arrest
- Respiratory distress

Age	Respiratory Rate
0-5 mos.	< 20
6 mos.-12 yrs.	< 16
13 yr-14 yr	< 12

Circulation

- Clinical signs of shock
- Patients who are receiving blood

Age	SBP	Pulse
0-5 mos.	< 60	
6 mos.-5 yr	< 70	<70
6 yr-14 yr	< 80	< 60

Neurological

- GCS <= 12 or deteriorating by 2

Anatomic Diagnosis

- Penetrating injury to head, neck, torso, groin, extremities proximal to elbow/knee
- Flail chest
- Open chest wound
- Crush Injuries
- Open or depressed skull fracture
- Complete/partial amputation or de-gloving above the wrist or above the ankle

Burns

- Who meet Level I trauma criteria
- Inhalation injury w/unsecured airway

May upgrade any level per ED Physician Discretion

Level II Trauma Criteria

Trauma patients with any of the following and who do not meet Level I:

- Suspected spine or spinal cord injury
- Bilateral femur fractures
- Pelvis fracture
- Severe maxillofacial injury
- Pedestrian struck at 20 mph or greater

Burns

- Inhalation injury w/secured airway

May upgrade any level per ED Physician Discretion

Level III Trauma Criteria (Consult)

Trauma patients with any of the following and who do not meet Level I or Level II:

- Falls over 10 feet
- Passenger ejected from a motorized vehicle
- Death or severe injury of same car occupant
- Prolonged extrication >20min
- Passenger compartment invaded >12 inches
- Transfer from another hospital with a known intracranial hemorrhage

May upgrade any level per ED Physician Discretion

Corresponding Clinical Procedure(s):

Trauma Code Criteria and Activation, PROC CM T-28A

Patient Education/Related Resources:

None

Form Name(s) and Number(s):

None

Originating Department: Trauma Service

Contributing Department(s): Emergency Medicine, Adult Trauma Systems Committee, Pediatric Trauma Systems Committee, Emergency Department Nursing, ED Registration

Evidence-Based Reference(s) for Policy:

Rotondo, M., Cribari, C., Smith, R. S. (Eds.). (2014). *Resources for optimal care of the injured patients*. Chicago, IL: American College of Surgeons.

Krieger AR, Wills HE, Green MC, Gleisner AL, Vane DW. (2012). Efficacy of anatomic and physiologic indicators versus mechanism of injury criteria for trauma activation in pediatric emergencies. *Journal of Trauma Acute Care Surgery*, 73 (6), 1471-1477.

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Zagory JA, Wieck MM, Lerner BE, Moody S, Falcone RA, Burke RV. (2017). Evaluation of highest level pediatric trauma activation criteria. *Pediatric Emergency Care*, 00 (00), 00-00.

Chen LE, Snyder AK, Minkes RK, Dillon PA, Foglia RP. (2004). Trauma stat and trauma minor: are we making the call appropriately? *Pediatric Emergency Care*, 20 (7), 421-425.

Lerner, E.B., Drendel, A.L., Falcone, R.A., Jr., Weitze, K.C., Badawy, M.K., Cooper, A., Cushman, J.T., Drayna, P.C., Gourlay, D.M., Gray, M.P., Shah, M.I., Shah, M.N. (2015). A consensus-based criterion standard definition for pediatric patients who needed the highest-level trauma team activation. *Journal of Trauma and Acute Care Surgery*, 78 (3), 634-638.

Falcone Jr., R.A., Haas, L., King, E., Moody, S., Crow, J., Moss, A., Gaines, B., McKenna, C., Gourlay, D.M., Werner, C., Meagher, D.P., Schwing, L., Garcia, N., Brown, D., Groner, J.I., Haley, K., Deross, A., Cizmar, L., Armola, R. (2012). A multicenter prospective analysis of pediatric trauma activation criteria routinely used in addition to the six criteria of the American College of Surgeons. *Journal of Trauma and Acute Care Surgery*, 73 (2), 377-384.

Evidence-Based Reference(s) for Procedure:

None