

# North Central Texas Trauma Regional Advisory Council

## Hospital Bypass Protocol

### 1. Purpose

This protocol is designed to provide guidelines to pre-hospital providers for the bypass of closer facilities when the patient's condition warrants transport to a facility capable of providing higher level trauma care. Transport decisions should also account for distance and time. If there should be any questions, Medical Control should be consulted. Trauma patients who are medically unstable, unconscious, or at high risk of multiple and/or severe injuries will be quickly identified and transported to an appropriate trauma system hospital.

The major trauma patient as defined in the NCTTRAC Trauma Triage Protocol is given below:

#### Definition of Major Trauma-Adult

- ! Multisystem Blunt or Penetrating Trauma With Unstable Vital Signs (BP<90, HR>120, RTS<11, GCS<14)
- ! Penetrating Injury of head, neck, torso, groin
- ! Burns > 20% TBSA (2nd or 3rd degree) or involving face, airway, hands, feet, or genitalia
- ! Amputation (with reimplantation potential)
- ! Paralysis or other signs of spinal cord injury
- ! Flail chest
- ! Open or suspected depressed skull fracture
- ! Unstable pelvis or suspected pelvic fracture
- ! Two or more long bone fractures
- ! High energy event, such as
  - ! Ejection from vehicle
  - ! Significant fall (> 20 feet)
  - ! Rollover mechanism
  - ! Bent steering wheel
  - ! Auto-pedestrian impact
  - ! Motorcycle or bicycle involvement
  - ! Significant assault
  - ! Prolonged extrication

Respiratory rate: <10 or >60

PTS<9

GCS<14

- ! Penetrating Injury of head, neck, torso, groin
- ! Burns > 20% TBSA (2nd or 3rd degree) or involving face, airway, hands, feet, or genitalia
- ! Amputation (with reimplantation potential)
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- ! Flail chest
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  - ! Ejection from vehicle
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  - ! Auto-pedestrian impact
  - ! Motorcycle or bicycle involvement
  - ! Significant assault

#### Definition of Major Trauma- Pediatric

- ! Multisystem Blunt or Penetrating Trauma With Unstable Vital Signs:
  - BP:
    - Neonate: <60 mmHg
    - Infant (<2yr) : <65 mmHg
    - Child (2-5 yr): <70 mmHg
    - Child (6-12 yr): <80 mmHg

## 2. Guidelines

- I. Closest receiving hospital as primary destination:
  - A. All blunt trauma victims receiving CPR should be taken to nearest facility capable of providing Advanced Life Support.
  - B. All penetrating trauma victims receiving CPR should be taken to the nearest trauma facility capable of providing the necessary interventions.
  - C. Major trauma patients without hypotension or airway problems should be transported to the closest receiving hospital if transport to a designated trauma facility will require transport times greater than 15 minutes. If air evacuation is necessary, the patient should be transported to the closest trauma facility or landing zone if a helicopter cannot be available in 15 minutes or less.

- II. Level IV (Basic) Trauma Facility as primary destination:

A Level IV Trauma Facility is appropriate for immediate stabilization of a major trauma patient if the expected transport time to a Level I/II facility is greater than 15 minutes. Air transport to the nearest Level I/II facility should be considered (see local Air Transport Protocol).

- II. Level III (General) Trauma Facility as primary destination:

A Level III Trauma Facility is appropriate for immediate stabilization of a major trauma patient if the expected transport time to a Level I/II facility is greater than 15 minutes. Air transport to the nearest Level I/II facility should be considered (see local Air Transport Protocol).

A Level IV Trauma Facility is appropriate when the only evidence of injury is a suspicion based on the mechanism of injury. These mechanisms of injury are: fall > 20 ft, ejection from vehicle, death of occupant in same vehicle, rollover mechanism, bent steering wheel, auto-pedestrian impact, motorcycle or bicycle involvement, or significant assault.

A Level III Trauma Facility has the capability to evaluate and manage most trauma patients. Major trauma patients with evidence of severe injury (multisystem blunt or penetrating trauma with unstable vital signs [BP < 90 mm Hg, HR > 120 bpm, or GCS < 14], penetrating injury of head, neck, torso, or groin, burns > 20% TBSA or involving face, airway, hands, feet, or genitalia, amputation with reimplantation potential, paralysis or other signs of spinal cord injury, flail chest, open or suspected depressed skull fracture, or unstable or suspected pelvis fracture) should be taken to a Level I/II facility if it is within 15 minutes transport time. Certain Level III facilities can manage some of these patients. If there is a question about the appropriate destination, Medical Control should be contacted.

III. Level I or II Trauma Center as primary destination:

All major trauma patients injured within 15 minutes transport time with one of the following:

- A. Multisystem blunt trauma with unstable vital signs (BP<90 mm Hg, RTS<11, GCS<14)
- B. All patients with a penetrating injury of head, neck, chest, or abdomen
- C. All patients with limb amputations that have the possibility of reimplantation
- D. All patients with paralysis or other signs of spinal cord injury
- E. All patients with open or suspected depressed skull fracture
- E. All patients with an unstable or open pelvic fracture

III. Regional Burn Center as primary destination:

Patients with second and third degree burns greater than 20% total body surface area or burns involving the face, airway, hands, feet, or genitalia

III. Pediatric Trauma Center as primary destination:

All major traumas in pediatric patients injured within 15 minutes.