



Where Good Health Begins

## Guidelines for Transfer to a Trauma Center

### I. Purpose:

To facilitate safe, appropriate and timely management of severe trauma patients who need to be transferred to a Level 1 Trauma Center.

### II. Definitions:

The following injury mechanisms/patient characteristics are considered especially high-risk and should put the provider on high-alert that a transfer for advanced care may be needed:

- Ejection from a motor vehicle
- Unrestrained rollover
- Death in same vehicle
- Extrication time > 20 minutes
- High speed auto-pedestrian or auto-bicycle (>20 mph) accident
- Motorcycle collision > 20 mph or un-helmeted or separation from motorcycle
- Fall from height > 20 feet
- All-terrain vehicle or equestrian ejection or rollover
- Trauma in pregnant patients > 20 week gestation
- Trauma in patients with multiple medical comorbidities, patients on anti-coagulations, or age  $\geq 65$  or < 14 years

### III. Facilities and Contacts:

Trauma transfers from EOGH go to University Hospital and are initiated by calling the transfer center at: 1-855-842-3648

### IV. Patient's Requiring Immediate or Emergency Transfer:

Stabilize the patient and immediately call the Transfer Center for consult and/or acceptance. Avoid unnecessary studies that would delay the transfer. The goal is transfer within **1 hour of arrival or recognition of injury.**

Physiologic:

- Systolic blood pressure < 90 mm Hg in a trauma patient
- Labile blood pressure despite 2 L of IV fluids or requiring blood products to maintain blood pressure

Airway:

- Intubated patients
- Tracheobronchial injury or threatened or compromised airway

Neck, Thoracic or Abdominal Injuries:

- Flail chest (3 or more ribs broken in two or more places)
- Penetrating injuries to head, neck, chest, or abdomen
- Pneumothorax or hemothorax with respiratory failure
- Known or suspected cardiac injury

Limb Injuries:

- Penetrating injuries proximal to elbow or knee
- Fracture/dislocation with loss of distal pulses and/or ischemia
- Bilateral femur fractures
- Traumatic amputation, mangled/degloved or impaled limb

Vascular Injuries:

- Traumatic vascular injuries with active arterial bleeding

Neurologic:

- GCS  $\leq$  8 or lateralizing signs
- Open or depressed skull fracture

Pelvic Injuries:

- Pelvic ring disruption or unstable pelvic fracture

Burn Injuries:

- Burns  $>$  20% BSA or to head, face, genitalia

Other:

- Any gunshot wound to the head, neck, chest, abdomen, or extremity at/or above elbow or knee
- MD or RN discretion

**V. Patient's Requiring Urgent Transfer:**

Stabilize the patient and call the Transfer Center to initiate transfer as soon as any of the following are identified. Avoid unnecessary studies. The goal is transfer **within 4 hours of arrival**.

Physiologic:

- Patients requiring blood products to maintain their blood pressure. (Consider using a cut off of 110 mm Hg in patients over 65 years of age.)
- Pediatric: labile blood pressure despite 20 ml/kg of fluid resuscitation (A systolic blood pressure less than 70 plus 2 times the age should suggest hypotension.)

Neck and Thoracic Injuries:

- Esophageal trauma
- Any great vessel injury
- Major chest wall injury with  $\geq$ 3 rib fractures and/or pulmonary contusion
- Maxillofacial trauma without airway compromise

Extremity Injuries:

- Amputation of extremity proximal to wrist or ankle
- Open long-bone fractures
- Two or more long bone fractures sites\*
- Crush injury to extremity

\*A radius/ulna fracture or tibia/fibula fracture are considered one site

Abdominal Injuries:

- Evisceration
- Free air, fluid or solid organ injury on diagnostic testing

Burn Injuries:

- Second or third-degree thermal or chemical burns involving more than 10% of the total body surface area in patients under 15 years or over 55 years of age
- Second or third-degree thermal or chemical burns involving the face, eyes, ears, hands, feet, genitalia, perineum, and major joints. \*
- Third-degree burns greater than 5% of the body surface area in any age group
- Electrical burns, including lightning injury
- Burn injury with inhalation injury

Neurological Injuries:

- GCS deteriorating by 2 points during observation
- Acute spinal cord injury
- Spinal fractures, unstable or potentially unstable
- Neurologic deficit

Pelvic/Urogenital:

- Bladder rupture

Co-Morbid Factors (consider transfer in these patients):

- Adults greater than 55 years of age with significant trauma
- Significant torso injury with advanced co-morbid disease (cardiac or respiratory disease, insulin-dependent diabetes, morbid obesity, immunosuppression or end stage renal disease requiring dialysis)
- Patients taking anti-coagulant medication or platelet inhibitors
- Children less than 14 years of age with significant trauma
- Traumatic injury and pregnancy greater than 20 week gestation

**VI. Amendments and revisions:**

This process may be amended or revised as the need arises. Users will be provided with copies of all amendments and revisions via email.

**VII. Report violations or obstacles to:** Dr. Hina Ghory at [hina\\_ghory@teamhealth.com](mailto:hina_ghory@teamhealth.com)