

Maryland EMS Clinicians Trauma Decision Tree

When in doubt, take patient to an appropriate Trauma Center

Measure vital signs and level of consciousness and assess for major injury

Category Alpha

- ☐ GCS less than or equal to 13
- ☐ For patients 10 years and older (including adults), systolic blood pressure less than 90 mmHg.
- ☐ For patients under 10 years of age, systolic blood pressure less than $70 + 2 \times \text{age in years mmHg}$.
- ☐ Respiratory rate less than 10 or greater than 29 (less than 20 in infant age less than one year) or need for ventilatory support

YES

Transport to trauma center or specialty center per protocol; alert trauma team; consider helicopter transport if quicker and of clinical benefit (refer to GPC section I).

NO

Assess for other injuries.

Category Bravo

- | | | |
|--|---|--|
| ☐ 2 or more proximal long-bone fractures | ☐ Crush, degloved, mangled, or pulseless extremity | ☐ Pelvic fracture |
| ☐ Amputation proximal to wrist or ankle | ☐ Open or depressed skull fracture | ☐ Paralysis (spine) |
| ☐ Chest wall instability or deformity (e.g., flail chest) | ☐ Penetrating injuries to head, neck, torso, or extremities proximal to elbow and knee | |

YES

Transport to Trauma Center or Specialty Center per protocol; alert trauma team; consider helicopter transport if quicker and of clinical benefit (refer to GPC section I).

NO

Evaluate for evidence of mechanism of injury and high-energy impact.

Category Charlie

- | | |
|--|---|
| ☐ High-risk auto crash <ul style="list-style-type: none"> • Intrusion (including roof) greater than 12 in. occupant site; greater than 18 in. any site • Ejection (partial or complete) from vehicle • Death in same passenger compartment • Vehicle telemetry data consistent with high risk of injury | <ul style="list-style-type: none"> • Rollover without restraint • Auto v. pedestrian/bicyclist thrown, run over, or with significant (greater than 20 mph) impact • Motorcycle crash greater than 20 mph |
| ☐ Falls <ul style="list-style-type: none"> • Adult: greater than 20 feet (one story is equal to 10 feet) • Pediatric: greater than 10 feet or 3 times the child's height | ☐ Exposure to blast or explosion |

YES

Transport to trauma center; alert trauma team. Patients within a **30-minute drive time** of the closest appropriate trauma/specialty center shall go by ground unless there are extenuating circumstances. **Receiving trauma center medical consultation required when considering whether helicopter transport is of clinical benefit** (refer to GPC section I).

NO

Evaluate for other considerations.

Category Delta

- | | |
|--|---|
| ☐ Older Adults <ul style="list-style-type: none"> • Risk of injury/death increases after age 55 • SBP less than 110 may indicate shock after age 65 • Low - impact mechanisms (e.g., ground-level falls) may result in severe injury | ☐ Burns <ul style="list-style-type: none"> • Without trauma mechanism, triage to burn center • With trauma mechanism, triage to trauma center |
| ☐ Children
(Should be triaged to Pediatric Trauma Center) | ☐ Pregnancy greater than 20 weeks
☐ EMS clinician judgment
☐ Anticoagulants and bleeding disorders
(Patients with head injury are at high risk for rapid deterioration) |

YES

Consider medical direction and transport to trauma center. Patients within a **30-minute drive time** of the closest appropriate trauma/specialty center shall go by ground unless there are extenuating circumstances. **Receiving trauma center medical consultation required when considering whether helicopter transport is of clinical benefit** (refer to GPC section I).

NO

Transport according to protocol.

Maryland Trauma/Specialty Referral Centers Quality Management Contacts

Adult Trauma Centers

PARC - Primary Adult Resource Center

R Adams Cowley Shock Trauma Center
Location: Baltimore, Maryland
Quality Management: (410) 328-2701
Email: stcems@umm.edu

LEVEL I Adult Trauma Center

The Johns Hopkins Hospital
Location: Baltimore, Maryland
Quality Management: (410) 614-4514

LEVEL II Adult Trauma Centers

Johns Hopkins Bayview Medical Center
Location: Baltimore, Maryland
Quality Management: TraumaQM@jhmi.edu

**University of Maryland
Prince George's Hospital Center**
Location: Cheverly, Maryland
Quality Management: (301) 618-3841

Sinai Hospital
Location: Baltimore, Maryland
Quality Management: (410) 601-7889

**Suburban Hospital -
Johns Hopkins Medicine**
Location: Bethesda, Maryland
Quality Management: (301) 896-3672

LEVEL III Adult Trauma Centers

Meritus Medical Center
Location: Hagerstown, Maryland
Quality Management: (301) 790-8366
Email: emsfeedback@meritushealth.com

Peninsula Regional Medical Center
Location: Salisbury, Maryland
Quality Management: (410) 543-7088

UPMC Western Maryland
Location: Cumberland, Maryland
Quality Management: (240) 964-3495

Pediatric Trauma Centers

The Johns Hopkins Hospital
Location: Baltimore, Maryland
Quality Management: (410) 502-0972

Children's National Medical Center
Location: Washington, DC
Quality Management: (202) 476-6726

Specialty Referral Centers

**Johns Hopkins Bayview Medical Center
Adult Burn Center**
Location: Baltimore, Maryland
Quality Management: (410) 550-5928

**The Johns Hopkins Hospital
Pediatric Burn Center**
Location: Baltimore, Maryland
Quality Management: (410) 502-0972

**MedStar Union Memorial Hospital
Hand and Upper Extremity Trauma Center**
Location: Baltimore, Maryland
Quality Management: (410) 554-4563

**The Johns Hopkins Hospital
Wilmer Eye Trauma Center**
Location: Baltimore, Maryland
Quality Management: (410) 614-1215

**R Adams Cowley Shock Trauma Center
Neurotrauma Center**
Location: Baltimore, Maryland
Quality Management: (410) 328-2701
Email: stcems@umm.edu

**R Adams Cowley Shock Trauma Center
Center for Hyperbaric Medicine**
Location: Baltimore, Maryland
Quality Management: (410) 328-2701
Email: stcems@umm.edu

Maryland Trauma Centers

