

County of San Diego Trauma Decision Algorithm

Major Trauma Victim

ASSESS VITAL SIGNS/LEVEL OF CONSCIOUSNESS

- Motor component of Glasgow Coma Scale (GCS) score <6
- Systolic blood pressure <90 mmHG
- Respiratory distress, respiratory rate <10 or ≥29 (adult), <20 for infant <1 year, or need for ventilatory support
- Room-air pulse oximetry <90% or desaturation from baseline if oxygen dependent
- **Peds:** Abnormal appearance &/or abnormal work of breathing &/or abnormal circulation

YES

Call Trauma Base,
Transport to appropriate
Trauma Center as Major
Trauma Victim (MTV)

NO

ASSESS ANATOMY OF INJURY

- Penetrating injuries to head, neck, torso, or extremities proximal to elbow or knee
- Chest wall instability, deformity, or suspected flail chest
- Suspected fracture of two or more proximal long bones
- Degloved, mangled, or pulseless extremity
- Amputation proximal to wrist or ankle
- Suspected pelvic fracture
- Skull deformity, suspected skull fracture
- Suspected spinal injury with new motor or sensory loss
- Vascular deficit of extremities
- Active bleeding requiring a tourniquet or wound packing with continuous pressure

YES

Call Trauma Base,
Transport to appropriate
Trauma Center as Major
Trauma Victim (MTV)

NO

ASSESS MECHANISM OF INJURY

- Fall from height ≥10 feet (all ages)
- High-risk auto crash:
 - Significant intrusion (including roof)
 - ≥12 inches occupant site **OR**
 - ≥18 inches any site **OR**
 - Need for extrication for entrapped patient
 - Partial or complete ejection
 - Death in passenger compartment
 - Child (age 0–9 years) unrestrained or in unsecured child safety seat
 - Vehicle telemetry data consistent with severe injury
 - Vehicle rollover with unrestrained patient
- Pedestrian/bicycle rider thrown, run over, or with significant impact
- Rider separated from transport vehicle with significant impact (e.g., motorcycle/scooter, electric/non-electric bicycles, ATV, horse)
- Exposure to blast or explosion
- Burns in conjunction with trauma
- Significant crush injury

YES

Call Trauma Base,
Transport to appropriate
Trauma Center as Major
Trauma Victim (MTV)

NO

ASSESS SPECIAL CONSIDERATIONS

- Age <5 or ≥55
- Low-level falls in children <5 years or adults ≥65 years with significant head impact
- Confirmed or suspected strangulation
- Bleeding disorders
- Anticoagulant or antiplatelet therapy, e.g., warfarin or clopidogrel, except ASA
- Pregnancy ≥20 weeks
- Chest and/or abdominal tenderness consistent with a high risk of injury
- Suspicion of non-accidental trauma in a pediatric or geriatric patient
- Poor baseline physiologic reserve, e.g., severe cardiac and/or respiratory disease
- Special, high-resource healthcare needs related to comorbidities (e.g., ventilator dependence or ventricular assist devices)
- EMS provider judgment

YES

Call Base,
transport to appropriate
Trauma Center or Non-
Designated Trauma
Center Hospital per BHO
MTV activation not
required

NO

- Re-evaluation with medical direction and transport to appropriate facility

When in doubt, take
patient to appropriate
trauma center