CRITERIA FOR CONSIDERATION OF TRANSFER

Purpose: To develop guidelines for consideration of transfer for trauma patients who have critical, life-threatening or burn injuries.

Policy: A trauma system is able to not only treat seriously injured trauma patients effectively and efficiently, but is able to recognize the need to transfer patients to the trauma hospital that can best provide the resources that the patient needs in a timely manner. Every effort should be made for early identification of potential critical or life threatening injuries and consider rapid transport to the appropriate trauma center. It may be appropriate for surgeon consultation prior to transfer of an injured patient for operative control of ongoing hemorrhage.

A. Critical injuries to Level I

1. Central Nervous System
- Penetrating injury/open fracture, with or without cerebrospinal fluid leak
- Depressed skull fracture
- GCS < 14 or deterioration
- Spinal cord injury or major vertebral injury

2. Chest
- Major chest wall injury or pulmonary contusion
- Wide mediastinum or other signs suggesting great vessel injury
- Cardiac injury
- Patients who may require prolonged ventilation

3. Pelvis/Abdomen
- Unstable pelvic ring disruption
- Pelvic fracture with shock or other evidences of continuing hemorrhage
- Open pelvic injury
- Solid organ injury

4. Major Extremity Injuries
- Fracture/dislocation with loss of distal pulses
- Open long-bone fractures
- Extremity ischemia

5. Multiple System Injury
- Head injury combined with face, chest, abdominal, or pelvic injury
- Burns with associated injuries
- Multiple long-bone fractures
- Injury to more than two body regions

6. **Co-morbid Factors**
   Age > 55 years
   Children < 5 years of age
   Cardiac or respiratory disease
   Insulin-dependent diabetes, morbid obesity
   Pregnancy
   Immuno-suppression

7. **Secondary Deterioration (Late Sequelae)**
   Mechanical ventilation required
   Sepsis
   Single or multiple organ system failure (deterioration in central nervous, cardiac, pulmonary, hepatic, renal, or coagulation systems
   Major tissue necrosis

FIELD TRIAGE DECISION SCHEME: THE NATIONAL TRAUMA TRIAGE PROTOCOL

Measure vital signs and level of consciousness

Glasgow Coma Scale	< 14 or
Systolic blood pressure	< 90 mmHg or
Respiratory rate	< 10 or > 29 breaths/minute (< 20 in infant < one year)

YES → Take to a trauma center. Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of care within the trauma system.

NO

Assess anatomy of injury

- All penetrating injuries to head, neck, torso, and extremities proximal to elbow and knee
- Flail chest
- Two or more proximal long-bone fractures
- Crushed, degloved, or mangled extremity
- Amputation proximal to wrist and ankle
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis

YES → **Take to a trauma center.** Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of care within the trauma system.

NO

Assess mechanism of injury and evidence of high-energy impact

Falls
- Adults: > 20 ft. (one story is equal to 10 ft.)
- Children: > 10 ft. or 2-3 times the height of the child

High-Risk Auto Crash
- Intrusion: > 12 in. occupant site; > 18 in. any site
- Ejection (partial or complete) from automobile
- Death in same passenger compartment
- Vehicle telemetry data consistent with high risk of injury

Auto v. Pedestrian/Bicyclist Thrown, Run Over, or with Significant (> 20 mph) Impact

Motorcycle Crash > 20 mph

YES → **Transport to closest appropriate trauma center,** which depending on the trauma system, need not be the highest level trauma center.

NO

Assess special patient or system considerations

Age
- Older Adults: Risk of injury death increases after age 55 years
- Children: Should be triaged preferentially to pediatric-capable trauma centers

Anticoagulation and Bleeding Disorders

Burns
- Without other trauma mechanism: Triage to burn facility
- With trauma mechanism: Triage to trauma center

Time Sensitive Extremity Injury

End-Stage Renal Disease Requiring Dialysis

Pregnancy > 20 Weeks

EMS Provider Judgment

YES → **Contact medical control and consider transport to a trauma center or a specific resource hospital.**

NO

Transport according to protocol

When in doubt, transport to a trauma center.

For more information on the Decision Scheme, visit: www.cdc.gov/FieldTriage.

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CENTERS FOR DISEASE CONTROL AND PREVENTION