

# State of Wisconsin Trauma Field Triage Guidelines

Is the patient ventilating or can the patient be ventilated?

1

YES

Measure Vital Signs and Level of Consciousness

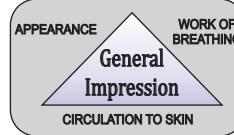
NO

Transport to the closest appropriate hospital or ALS/Air Medical Intercept for RSI/Definitive airway management.

2

Glasgow Coma Scale  $\leq 13$  or  
Systolic Blood Pressure  $< 90$  mmHg or  
Respiratory Rate  $< 10$  or  $> 29$  ( $< 1$  year)  
or need for ventilatory support

PEDIATRIC ASSESSMENT TRIANGLE



PEDS: 1 or more abnormalities in Pediatric Assessment Triangle

YES

Transport to a trauma center. Steps 2-3 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of trauma care within the defined trauma region.  
PEDS: Consider transport to a pediatric trauma center within region.

NO

Assess anatomy of injury

3

All penetrating injuries to head, neck, torso, and extremities proximal to elbow or knee  
Chest wall instability or deformity (e.g. flail chest)  
Two or more suspected fractures involving the femur or humerus  
Crushed, degloved, mangled, or pulseless extremity  
Complete or partial amputation proximal to wrist or ankle  
Pelvic fracture/unstable pelvis  
Open or depressed skull fractures  
New onset paralysis (paraplegia/quadriplegia)

YES

Transport to a trauma center. Steps 2-3 attempt to identify the most seriously injured patients. These patients should be transported preferentially to the highest level of trauma care within the defined trauma region.  
PEDS: Consider transport to a pediatric trauma center within region.

NO

Assess mechanism of injury and evidence of high-energy impact

4

FALLS  
HIGH-RISK AUTO CRASH  
Auto vs pedestrian/bicyclist thrown, run over, or with significant ( $> 20$  mph) impact  
Motorcycle crash  $> 20$  mph  
Adults  $> 20$  feet (one story is equal to 10ft)  
Children  $> 10$  feet or 2-3 times the height of the child  
Intrusion, including roof:  $> 12$  inches occupant site,  $> 18$  inches any site  
Ejection (partial or complete) from automobile  
Death in same passenger compartment  
Vehicle telemetry data consistent with high risk of injury

YES

Transport to a trauma center, which depending upon the defined trauma region, need not be the highest level trauma center.

NO

Assess special patient or system considerations

5

AGE Older adults: Risk of injury/death increases after age 55 years  
SBP  $< 110$  may represent shock after age 65 years  
Low impact mechanisms (e.g. ground level falls) may result in severe injury  
Consider transport to a pediatric trauma center within the region  
Children: Without other trauma mechanism: triage to burn facility  
With trauma mechanism: triage to trauma center  
BURNS  
Anticoagulants and bleeding disorders: patients with head injury are at high risk for rapid deterioration  
Pregnancy  $> 20$  weeks  
EMS Provider Judgment

YES

Transport to a trauma center or hospital capable of timely and thorough evaluation and initial management of potentially serious injuries. Consider consultation with medical control.

NO

Transport according to protocol

When in doubt, transport to the closest Level I or II Trauma Center

**Box 1:** Regardless of other injuries and conditions, a trauma patient must have a secure airway and be able to breathe (ventilate) effectively or be ventilated by EMS. BLS techniques and adjuncts are sufficient if the airway is adequately protected and the patient can be effectively ventilated. If not, ALS must secure the airway or the patient be transported to the closest hospital where the airway can be managed.

**Box 2:** Vital signs are some of the most reliable ways to identify serious injury or condition. The Pediatric Assessment Triangle may be used for children and any abnormality in the General Impression should be considered an indication of major trauma. The Triangle may be used on any patient that “appears” to be a child or any patient that has yet to develop adult features (armpit hair/ facial hair in males, breasts in females).

**Box 3:** Although not all injuries may not be considered “life threatening,” they are all conditions that are best cared for at a Level I or II Trauma Center and taking them directly reduces the chance of complications often seen in patients that are transferred from one hospital to another. A thorough assessment of the patient may be required to identify some of these injuries.

**Boxes 2 and 3** contain the criteria that are most associated with major trauma. When possible these patients should go to the highest level of trauma care in the region. The NCRTAC recommends that if transport time to the closest most appropriate Level I or II Trauma Center by ground ambulance is within 30 minutes (at safe travel speeds) ground transport should be initiated. If the Trauma Center is more than a 30 minute ground transport, the patient should be transported to the Trauma Center by helicopter. If a helicopter is not available, the patient should be transported to the closest Level III or IV Trauma Center.

**Box 4:** Mechanism generally does not have a direct relationship with injury but these mechanisms are considered some of the most likely to be associated with severe injury. EMS providers should be especially watchful of these patients and have a high index of suspicion to consider them major trauma patients.

**Box 5:** Factors such as age, associated burns and medical conditions may make the care of a trauma patient more complicated. Transport to a Level I or II Trauma Center should be considered but is not required.

**Boxes 4 and 5** identify patients that do not automatically require Level I or II Trauma Center care but consideration should be made for it. Consultation with On-Line Medical Control is advised.

**EMS Provider Judgment** is always an important piece of the trauma assessment as not all conditions and situations can be covered by these guidelines. If your experience and assessment of the entire situation tell you that the patient is severely injured, **trust your gut**. The American College of Surgeons endorses an overtriage rate of 25-50% while recommending that undertriage be less than 5%.

**Trauma Center:** All hospitals in Wisconsin that have been verified by the American College of Surgeons as a Level I or II or classified by the Wisconsin Department of Health Services as a Level III or IV are referred to as Trauma Centers.

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