

# Flight Criteria Recommendations

## Recommendation Guidelines

- A. This list has been prepared using the American College of Surgeons (ACS) recommendations for Trauma Center activation as well as the Association of Air Medical Services (AAMS) flight recommendations.
- B. These criteria encompass both trauma and medical patients.
- C. This list also closely follows the LifeNet protocols for field triage decision making.
- D. The three categories for trauma team activation, as well as AAMS flight criteria after ED evaluation are:
  - 1. Anatomical
  - 2. Physiological
  - 3. Mechanism of Injury (MOI)
  - 4. Complicating Factors
- E. **MOI and Complicating Factors** are not necessarily reasons to transport by air. These patients should be viewed with an increased index of suspicion for serious injury when any are present in the trauma setting.

## General Criteria

- A. **Anatomical**-none
- B. **Physiological**
  - 1. Requires critical care life support (monitoring, personnel, medications, or specific equipment) during transport not available from the local ground service.
    - a. Exceptions to the med list are Heparin and NTG drip. Patients on these medications may be transported by a standard ground unit as long as patient is physiological stable and the physician does not expect significant deterioration enroute.
  - 2. The patient's clinical condition requires that the time spent in transport mode be as short as possible.
  - 3. The potential for delays associated with ground transport (road obstacles or traffic) is likely to worsen the patient's clinical status.
  - 4. Requires specific or timely treatment not available at the referring hospital or facility.
  - 5. The patient's clinical condition requires that physicians who are intimately familiar with the patient's history give care.
- C. **MOI**-none
- D. **Complicating Factors**
  - 1. The use of a local ground transport team would leave the local area without EMS coverage for a significant amount of time.

## Trauma Patients (In-House)

- A. **Anatomical**
  - 1. Burns of the skin greater than 15% of the body surface area.
  - 2. Penetrating injury on the body between mid-thigh and head.
  - 3. Near-amputation or amputation requiring evaluation for possible re-implantation.
  - 4. Scalping or degloving injury.
  - 5. Major burns of the hands, feet, or perineum.
  - 6. Burns that are associated with an airway or inhalation injury.

7. Has great potential to experience injury to the spinal cord, spinal column, or neurological deficit.
8. Facial or neck injuries, which might result in an unstable airway and may require invasive procedures to stabilize the airway (Endotracheal Intubation, RSI, Tracheotomy, or Cricothyroidotomy).

**B. Physiological**

1. Severe hemorrhaging.
2. Unable to maintain a systolic blood pressure greater than 90 mm hg after initial volume resuscitation.
3. Requires an ongoing blood transfusion to maintain a stable blood pressure.
4. Revised Trauma Score or Glasgow Coma Score, which indicates a severe injury is present.
5. An adult with a respiratory rate of less than 10 or greater than 30, or a heart rate less than 60 or greater than 120.

**C. MOI**

1. Structural intrusion into the patient's space in the vehicle.
2. Another person in the same vehicle died.
3. Pedestrian struck by a vehicle traveling more than 20 MPH.
4. Unrestrained in an overturned vehicle.
5. Thrown from a motorcycle traveling more than 20 MPH.
6. The front bumper of the vehicle was displaced by more than 30 inches, or the front axle was displaced to the rear.
7. Fall from a height greater than 20 feet.
8. Ejection from the vehicle.

**D. Complicating Factors**

1. Child less than 5 years of age with multiple traumatic injuries.
2. Greater than 55 years of age with multiple traumatic injuries.

**Adult Medical / Surgical Patients:**

**A. Anatomical**

1. The patient is experiencing a leaking or dissecting aneurysm.

**B. Physiological**

1. Respiratory or cardiac arrest in the last 12 hours that is experiencing acute respiratory failure not responsive to initial therapy.
2. Requires continuous intravenous vasoactive medications or mechanical ventricular assist to maintain a stable cardiac output.
3. Requires continuous intravenous antidysrhythmic medications or a cardiac pacemaker to maintain a stable cardiac rhythm.
4. Requires mechanical ventilator support or is at risk for having an unstable airway.
5. Experienced an acute deterioration in mental status.
6. Requires immediate invasive therapy for hypothermia.
7. An indwelling pulmonary arterial catheter, arterial line, or intracranial pressure bolt that requires monitoring.
8. Respiratory rate of less than 10 or greater than 30, or a heart rate less than 50 or greater than 150.

9. Systolic blood pressure less than 90 mmhg or greater than 200 mmhg.
10. Evidence of significant acidosis that is not responding to initial therapy.
11. Requires immediate transport by a critical care team to a medical center that can perform organ transplantation or procurement.
12. Experiencing an Acute Myocardial Infarction.
13. Experiencing an evolving acute cerebrovascular accident.
14. Experiencing seizures that cannot be controlled at the referring institution.

C. **MOI**-none

D. **Complicating Factors**-none

Obstetrical:

A. **Anatomical**

1. Premature Rupture of Membranes with or without labor.
2. Placenta Previa.

B. **Physiological**

1. Pregnant with a high-risk obstetrical condition requiring urgent transport to a perinatal center.
2. Eclampsia.
3. Pre-Eclampsia.
4. Premature labor.

C. **MOI**-none

D. **Complicating Factors**-none

Pediatrics:

A. **Anatomical**

1. Multiple traumatic injuries.

B. **Physiological**

1. At high risk of developing cardiac dysrhythmias or cardiac pump failure that requires interventions not available at the referring hospital.
2. At high risk of developing acute respiratory failure or respiratory arrest that is not responding to initial therapy.
3. Requires invasive procedures to stabilize the airway (Endotracheal Intubation, RSI, Tracheotomy, or Cricothyroidotomy).
4. Respiratory rate less than 10 or greater than 60 or a systolic blood pressure less than normal for age.
5. Victim of near drowning with altered mental status or signs of hypoxia.
6. Status Epilepticus.
7. Acute Bacterial Meningitis.
8. in Acute Renal Failure.
9. Unstable toxicologic syndrome.
10. Reye's Syndrome.
11. Hypothermia.

C. **MOI**-none

D. **Complicating Factors**-none

**Last Update 12/06/02**