

NWAAR Air Medical Necessity Guidelines

October 2009

I. Background

The Northwest Association of Aeromedical Responders (NWAAR) was formed to promote safety and quality patient care among the air medical programs servicing Oregon, Washington and Idaho.

This document serves as a reference for NWAAR members and referral agencies considering the activation an air medical transport team. These guidelines are not meant to be all-inclusive. There are situations where a specific condition not listed in the guidelines would meet the general principles of the guidelines and air transport would be appropriate. Also, the list below is not a mandate that requires air transport for all patients with the conditions that appear on the list. The guidelines are merely a list of conditions for which air transport should be considered.

II. Purpose:

- Improve patient care in the prehospital setting.
- Foster consistency among the programs providing air medical transportation in the region.
- Provide utilization guidelines for agencies requesting air medical transport.
- Provide guidelines for mutual aid requests among NWAAR programs.

III. Guidelines

A. INTERHOSPITAL TRANSPORTS

In general, air medical transport should be considered when the time saved is believed to be significant enough to allow a potentially beneficial intervention to take place at the receiving facility or it is determined that the patient has a high potential for deterioration during transport and the out of hospital time must be minimized. Inaccessibility by ground or prolonged ground transport times may also necessitate the need for transport by air. Air Medical transport is recommended for the following:

Medical Condition List:

- Acute cardiac emergencies requiring emergent/time-sensitive intervention not available at sending facility.
- Acute neurological emergencies requiring emergent/time sensitive interventions not available at the sending facility.
- Acute stroke syndromes requiring or potentially requiring emergency/time-sensitive diagnosis and intervention at a stroke treatment center.
- Acute vascular emergencies requiring emergent/time sensitive interventions not available at sending facilities.
- Acute surgical emergencies requiring emergent/time sensitive interventions not available at the sending facility.
- Critically ill patients with compromised hemodynamic/respiratory function who require intensive care during transport and whose time of transfer between critical care units must be minimized.

- Critically ill obstetric patients who require intensive care during transport and whose times of transfer between facilities must be minimized to prevent maternal or fetal morbidity/mortality.
- Critically ill neonatal/pediatric patients with potentially compromised hemodynamic/respiratory function, a metabolic acidosis greater than 2 hours post delivery, sepsis, or meningitis.
- Patient with electrolyte disturbances and toxic exposure requiring immediate life-saving intervention.
- Transplantation patients who cannot meet the time restrictions if transported by ground.
- Patients requiring care in a specialty center not available at the sending facility.
- Conditions requiring emergent treatment in a Hyperbaric Oxygen Unit.
- Significant burns requiring treatment in a burn treatment center.
- Potentially life or limb-threatening trauma requiring treatment at a trauma center, including penetrating eye injuries and amputations requiring end destination reimplantation strategies.
- EMTALA physician-certified inter-facility transfer (not a patient request).

B. SCENE TRANSPORTS

For scene transport to be efficacious, the helicopter response should take significantly less time (>20 minutes time savings) than it takes to travel by ground to the closest appropriate facility. If this is not the case, strong consideration should be given to activating the helicopter from the scene, and meeting at the local hospital. This decision should be made in conjunction with local medical control. This is particularly important for head injured and hypotensive patients. Helicopter transport is recommended for the following:

(1) Trauma

- Head injured patients with one of the following:
 - GCS < 10 or deteriorating
 - Trauma score <12 or deteriorating
 - Pediatric trauma score <10 or deteriorating
 - Change in LOC and/or neurological deficits
- Significant penetrating injury above mid-thigh, in torso, or head.
- Patients with the following chest injuries:
 - Possible tension pneumothorax
 - Major chest wall injury
 - Potential cardiac injury
 - Penetrating chest wound
- Patients with unstable vital signs including hypotension, tachypnea, severe respiratory failure.
- Patient with burns of greater than 10% BSA or major burns of face, hands, feet, or perineum.
- Major electrical or chemical burns.
- Patients with spine injuries with neurologic involvement and potential airway/breathing compromise.
- Amputation or near amputation.
- Two or more long bone fractures or a major pelvic fracture.
- Patients with scalping injury or “degloving” injury.
- Patients with a significant mechanism of injury, hemodynamic instability, and associated signs and symptoms including:
 - MVA with significant structural intrusion into victim’s space.

- Speed of vehicle >55 mph.
- MVA with extrication time >15 minutes or prolonged entrapment time.
- MVA with patient ejected.
- MVA with associated fatalities.
- Motorcycle victim ejected at >20 mph.
- Pedestrian struck and thrown >15 feet.
- Fall from a height of 20 feet or greater.
- Crushing injuries to the abdomen, chest, or head.
- Near-drowning injuries, with or without existing hypothermia.
- Trauma patients <12 or >55 years old.

(2) Non-trauma

- Any patient airway that cannot be maintained.
- Patient with a cardiac disease and is experiencing a progressively deteriorating course, is unstable, and/or requires measures not available enroute (e.g. ALS level care, cardiac catheterization, thrombotic therapy.)
- Patient is experiencing a severe neurological illness requiring neurosurgical or other intervention that is not available enroute. (CVA, uncontrolled seizures, etc.)

C. EXCEPTIONS

Some patients that do not meet the above indications for air transport may still be candidates for air transport under the following circumstances:

- Long distance transports of critical patients (more than 2 hours by ground)
- Remote locations with isolated injury patients that could create a prolonged painful transport (i.e. logging injury).
- Situations where a ground CCT unit will not be available for an extended time period.
- Situations where resources at the sending facility and/or scene are severely limited:
 - Mass casualty situations
 - Lack of availability of ground transport
 - Lack of availability of specialty care personnel (with a minimum of one registered nurse) to accompany patient
- Road conditions which may extend ground transport times (e.g. icy roads, flooding, remote locations, bridge openings, heavy traffic, etc.)
- Land transport would deplete the local community of vital EMS services for an extended period of time.
- EMS regional or state-approved protocol identifies need for on-scene air transport.

D. EXCLUSIONS

Patients for whom air medical transport is contraindicated include:

- Patients who have been pronounced dead. (The need for or potential for cardiopulmonary resuscitation is not a contraindication for air transport.)
- Obstetrical patients in advanced active labor and in whom an imminent and /or precipitous delivery can be expected.
- Patients with actual or potential for violent or self-destructive behavior that cannot be adequately and safely restrained or controlled using chemical or physical restraints.
- A patient in traumatic full arrest if another critically injured patient requires air transport and is determined to have a greater chance of surviving with rapid transport by air.

- HAZMAT victims not appropriately decontaminated that pose a risk to the crew or could potentially contaminate the aircraft.

E. REFERENCES

Air Medical Physician Association. (2001). Appropriateness of Air Medical Transport in Acute Coronary Syndromes. Retrieved January 5, 2005 from: <http://www.AMPA.org>.

Air Medical Physician Association. (2004). Appropriateness of Medical Transport and Access to Care in Acute Stroke Syndromes. Retrieved January 5, 2005 from: <http://www.AMPA.org>.

Air Medical Physician Association. (2002). Determination of Medical Necessity for Air and Critical Care Medical Transportation. Retrieved December 5, 2004 from: <http://www.AMPA.org>

Air Medical Physician Association. (2002). Medical Condition List and Appropriate Use of Air Medical Transport. Retrieved January 5, 2005 from: <http://www.AMPA.org>.

Centers for Medicare Services. (2004). Ambulance Reimbursement. http://www.cms.hhs.gov/manuals/102_policy/bp102c10.pdf.

Commission on Accreditation of Medical Transport Systems. (2004). Accreditation Standards (5th ed.). www.camts.org.

North Carolina College of Emergency Physicians. (2002). Air Transport Standards Policy. Retrieved December 5, 2004 from: <http://www.nccep.org>.

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