

Region 7 Trauma Network
(Charlevoix County MCA, Manistee County MCA, North Central Michigan MCA, Northern Michigan MCA, Northwest Regional MCA, Otsego County MCA)
System Protocols

Air Medical Services

Date:

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Air Medical Services

Purpose: To provide for an efficient and effective utilization of Air Medical Services within the system in a way that will maximally benefit the EMS patients while being safe, cost-effective, and fully integrated with the rest of the EMS System.

1. Definitions

- a. *Stand-by:* The air medical service agency is alerted of a potential impending request for services.
 - i. The agency will be prepared for an immediate response, without actually lifting the aircraft.
 - ii. If the scene is greater than 25 miles away from the launch point, the crew of the aircraft may choose to launch and start towards the scene. This is at the discretion of the crew based on dispatch information, potential time savings, safety, etc.
- b. *Launch:* A request for an air medical service to respond to a scene. The aircraft is dispatched, lifts and flies to the scene.
- c. *Auto-launch:* An air medical service is requested to a scene by dispatch specialists or EMS personnel based on dispatch information, predicted injuries, distance, criteria stated in this policy, or resources requested. The aircraft is dispatched, lifts and flies to the scene.

2. General Stipulations

- a. The primary benefit derived from air medical transports is time saved in reaching definitive care. Therefore, when considering whether air medical transport is indicated, patient acuity and the distance to a specialty care center need to be a primary focus of the responder.
- b. Early activation of air medical resources saves considerable time. Launching the aircraft at the same time as the ground EMS providers are dispatched saves time and lives. EMS dispatchers or EMS agency personnel in Region 7 should place helicopter resources on auto-launch status based on Auto-launch Criteria which are included in this document below in item #4. Any area that is greater than 30 minutes by ground to the Trauma Center should use auto-launch criteria.
- c. For guidance on scene safety, refer to the Michigan System Protocol “Helicopter”.

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3. Indications for Using Helicopters

a. Patients

- i. Critically injured trauma patients who require transport to a specialty care or trauma center.
- ii. Critical medical patients who can benefit from earlier definitive care.

b. Distance

- i. Under normal circumstances, helicopter transport should not be considered when the estimated ground transport time is less than 15 minutes.
- ii. For ground transport times less than 30 minutes, transporting ambulance crews should not wait on-scene for a helicopter to arrive. If the patient is packaged and ready for transport, the ground unit shall proceed immediately toward the trauma center destination without delay.
- iii. In cases where the estimated ground transport time exceeds 30 minutes, EMS crews may wait on-scene for helicopter arrival or meet the helicopter at an agreed upon landing zone.

c. Other

- i. Poor road conditions
- ii. Multi-casualty incidents where resources are depleted.
- iii. Patients that may require definitive care that is only available at a specialty care center located outside of the MCA.

4. Auto-Launch

Either the EMS agency or 911 dispatch center should launch the helicopter at the same time that the ground units are dispatched based on the following criteria:

- a. Inaccessible by ground
- b. Multiple patients (mass casualty incident)
- c. Multiple injuries in a geriatric, pediatric or pregnant patient
- d. Mechanism:
 - i. Falls — Adults: >20 feet (one story is equal to 10 feet) — Children: >10 feet or two to three times the height of the child
 - ii. High-risk auto crash
 1. Intrusion: >12 inches occupant site; >18 inches any site
 2. Ejection (partial or complete) from automobile
 3. Death in same passenger compartment
 4. Vehicle telemetry data consistent with high risk of injury
 - iii. Auto vs. pedestrian/bicyclist thrown, run over, or with significant (>20 mph) impact

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- iv. Motorcycle crash >20 mph
 - v. All penetrating injuries to head, neck, torso and extremities proximal to elbow and knee
 - vi. Flail chest
 - vii. Two or more proximal long-bone fractures
 - viii. Crushed, degloved, or mangled extremity
 - ix. Amputation proximal to wrist and ankle
 - x. Pelvic fractures
 - xi. Open or depressed skull fracture
 - xii. Paralysis
 - xiii. Crush injuries to abdomen, chest or head
 - xiv. Drowning
 - xv. Critical burns to face, head, hands, feet or genitals or trauma with burns
 - xvi. Inhalation injury
5. Other trauma indications for air transport may only become apparent after evaluating the patient. They include:
- a. Unstable vital signs: systolic blood pressure < 90 mmHg; respiratory rate < 10 or > 29 breaths per minute or need for ventilatory support (< 20 in infant aged less than 1 year)
 - b. Multisystem injuries
 - c. Neuro: suspicion of spinal injuries or skull fracture, decreasing LOC or patient with a GCS of less than 13
 - d. Chest: flail chest, hemothorax or pneumothorax, suspected cardiac injury
 - e. Abdomen: significant abdominal pain with blunt trauma, abdominal wall contusions, low rib fractures or pelvic fractures
 - f. Ortho: extremity injuries with vascular compromise, multiple long bone fractures
6. Medical indications for air transport may also include ***at the discretion of on-line medical control***:
- a. OD/poisoning
 - b. Shock
 - c. Unstable medical patients requiring specialized services
 - d. Time-urgent surgical emergencies such as fasciitis, extremity ischemia, aneurysm or aortic dissection
 - e. Neuro: spinal cord compression, CNS bleed, status epilepticus
 - f. Respiratory/cardiac: acute pulmonary failure, angioedema/epiglottitis, need for urgent cardiac intervention, cardiac tamponade, pre-transport cardiac arrest, vasoactive medications, mechanical ventricular assist, unstable cardiac mechanical disease
 - g. Abdominal: GI bleed with shock
 - h. OB: delivery of specialty team to the patient

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7. Procedure

- a. Public Safety (police, fire, EMS, dispatch) may request an air-medical service be placed on stand-by, launch or auto-launch by contacting the appropriate dispatch center.
- b. As there is only one helicopter provider in the region, when this resource is not available, a secondary helicopter from outside the region may be requested, based on proximity to the scene and availability. The flight communications center for the primary helicopter service will assist in this effort.
- c. Information critical to the air medical crew should also be relayed as soon as possible:
 - i. Scene location
 - ii. Number of patients (with weight if possible)
 - iii. Landing Zone information
- d. The responding air medical service will need a landing zone set up and contact with the landing zone officer via radio. Talk group for communications will be designated at the time of dispatch.

8. Cancellation

- a. Helicopter response shall only be cancelled by the following:
 - i. An MCA active EMT, AEMT, or paramedic that is on-scene and has evaluated the patient(s).
 - ii. An MCA active paramedic prior to arrival based on information received from first responders, whether MFR, BLS, or Public Safety.
 - iii. A hospital that has received a patient **or patient report** and request from on-scene responders to cancel a helicopter response.
- b. The reason for any cancellation will be documented by the air medical program dispatch center for quality review purposes.

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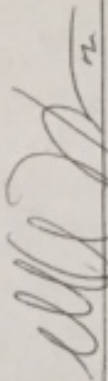
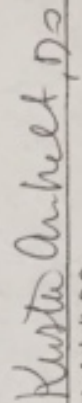
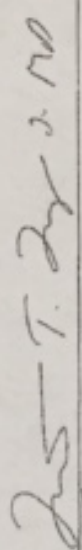
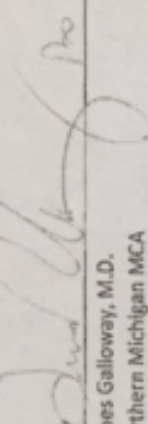
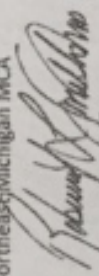
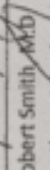
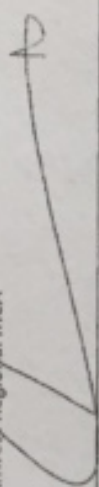
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REGION 7 TRAUMA NETWORK

My signature below indicates that as the medical control authority medical director for the named MCA, I am requesting approval of the Region 7 Trauma Network "Air Medical Services" system protocol attached.

	_____ Date
Mark Smith, M.D. Charlevoix County MCA	4/14/16
	_____ Date
Krista Anhalt, D.O. Manistee County MCA	4/16/16
	_____ Date
Martin F. Lougen, M.D. North Central Michigan MCA	3/15/16
	_____ Date
James Galloway, M.D. Northern Michigan MCA	13 Apr 16
	_____ Date
Christopher Rancont, D.O. Northeast Michigan MCA	
	_____ Date
Robert Smith, M.D. Northwest Regional MCA	03/15/16
	_____ Date
Kasey Nelson, D.O. Otsego County MCA	3/14/16

Region 7 Trauma Network March 15, 2016
Regional Board Approval Date: March 15, 2016
MDHHS Approval Date May 19, 2016
Regional Implementation Date June 21, 2016

Section