

EMS AIRCRAFT – REQUEST, TRANSPORT CRITERIA, AND FIELD OPERATIONS

I. PURPOSE

To identify procedures for use by public safety agencies when requesting a medical helicopter or rescue aircraft for an EMS system response.

To specify criteria for patient transport by air ambulance (medical helicopter) and to outline coordination of field operations at incidents involving air ambulance response.

To assure the most appropriate, safest, and most cost effective method of transport based on the needs of the patient.

II. AUTHORITY

Division 2.5, California Health and Safety Code; Title 22. Division 9 and Chapter 8, California Code of Regulations.

III. REQUEST FOR MEDICAL HELICOPTER OR RESCUE AIRCRAFT

- A. The Incident Commander (IC) or designee is responsible for initiating a medical helicopter or rescue aircraft response through his or her fire/medical dispatch center if these resources are thought to be necessary and are in the best interest of the patient. Requests may occur prior to or after IC arrival at scene.
- B. Requests should include the current weather conditions, and if known:
 1. Number of patients potentially requiring helicopter transport,
 2. Current weather conditions, and
 3. Haz-Mat information if pertinent.

IV. EMS AIRCRAFT UTILIZATION CRITERIA

Helicopter transport involves increased costs and more potential risk in transport. The benefits of transport should outweigh risks. For these reasons, helicopter transport should only be used when both time and clinical criteria are met.

A. Time Criteria.

Helicopter transport generally should be used only when it provides an advantage in terms of timely delivery of the patient from the scene to the emergency department.

1. Helicopter field care and transport time (which includes on-scene time, flight time, and transport from helipad to the emergency department) is optimally 20-25 minutes in most cases.
2. Time to ground transport a patient to a helicopter rendezvous site, or a time delay in helicopter arrival are additional factors to be considered when determining whether or not a helicopter is the most rapid method of transport overall.
3. Trauma patients with potential need for advanced airway intervention (GCS 8 or less, trauma to neck or airway, rapidly decreasing mental status) may be appropriate for helicopter transport even when time criteria is not met.

B. Clinical Criteria

1. Patients who meet the following criteria may benefit from helicopter transport.
 - a. Trauma patients who meet high-risk criteria according to EMS trauma triage policy except for:
 - 1) Stable patients with isolated extremity trauma (who may meet high-risk criteria on that basis).
 - 2) Patients with mechanism but no significant physical exam findings.
 - b. Trauma patients who do not meet high-risk criteria but by evaluation of mechanism and physical exam findings, appear to have potential significant injuries that merit rapid transport.
 - c. Patients with specialized needs available only at a remote facility such as burn victims or critical pediatric patients.
 - d. Critically ill or injured patients whose conditions may be aggravated or endangered by ground transport (e.g. limited access via ground ambulance or unsafe roadway) may be appropriate for helicopter transport.

V. **HELICOPTER UTILIZATION AND CANCELLATION DECISION**

- A. The decision to use a helicopter rests with the Incident Commander (IC).
- B. The IC is responsible for cancellation of the helicopter response when helicopter transport criteria are not met. The following information is important for the IC to consider in making the best possible decision regarding mode of transport:
 1. Patient need. The paramedic with primary patient care responsibility will have the best information regarding the patient meeting clinical criteria.
 2. Estimated ground transport time versus air response and transport. The ground transport crew will be the best resource for determining whether or not there will be a transport time savings based on the travel time considering current traffic/weather conditions particularly when timesavings by helicopter is minimal.
 3. Proximity of a helispot or need for a helicopter/ambulance rendezvous site. A significant amount of time may be added to overall transport time if a helicopter is unable to land in proximity to the patient.
 4. ETA of the helicopter. If the patient is packaged and ready for transport, ground transport may be the fastest mode of transport overall if a helicopter has not arrived on scene.
- C. The ground ambulance responding to, or at the scene, should not be canceled until:
 1. The helicopter has left the scene with the patient aboard, or
 2. The senior medical personnel with primary patient care responsibility on-scene have determined that no patient transport is required.

VI. **COMMUNICATIONS**

- A. Under normal circumstances, CALCORD is utilized for air-to-ground communication. The IC or designee, in conjunction with the fire/medical dispatch will designate an alternate frequency if necessary.
- B. The IC or designee may cancel a helicopter response at any time prior to patient transport through the fire/medical dispatch center or by direct communication to the responding helicopter.

VII. GROUND AMBULANCE RESPONSIBILITIES

- A. Ground ambulance units shall make trauma base contact as soon as possible to provide early notification of patient arrival.
- B. A ground unit paramedic, who accompanies a patient in a rescue aircraft must assure the presence of appropriate medical equipment and must obtain orientation to the aircraft and to medical air transport procedures prior to transport.

VIII. HELICOPTER RENDEZVOUS

- A. If a helicopter rendezvous is deemed appropriate even considering added transport time, a helispot (rendezvous site) as close as possible to the scene should be established.
- B. A first-responder paramedic may elect to maintain primary patient care responsibility by accompanying the patient in transport to the helispot in order to facilitate communication with the treating helicopter crew.

IX. MULTICASUALTY INCIDENT (MCI) RESPONSES

Detailed roles and responsibilities for EMS helicopter providers during multicasualty incidents are specified in the County MCI Plan. Helicopters:

- A. Respond to an incident only when requested.
- B. Prepare to stage at closest airport or location designed by the Incident Commander.

X. INCIDENT REVIEW AND QUALITY IMPROVEMENT

- A. Helicopter providers shall participate in EMS Agency quality improvement activities.
- B. Contra Costa EMS maintains oversight of helicopter utilization and works with helicopter provider agencies in assuring appropriate use of helicopter resources.