I. PURPOSE: To define criteria for patient transport via helicopter

II. POLICY: Patients shall be transported to hospitals via ground ambulance unless such transport is unavailable or if ground transport is significantly longer than air transport (and this difference in time may negatively impact the patient's condition)

III. PROCEDURE:

A. If a helicopter is being considered for patient transport, early recognition (including request for a helicopter while enroute to the call) will help decrease delay in patient transport

B. Helicopter transportation of patients should be considered for cases that meet ALL of the following criteria. Transport decisions will be determined jointly by the Base Hospital (BH), if BH contact is established, and on-scene personnel.

1. A minimum of 15 minutes ground travel time to the appropriate hospital,
2. The helicopter can deliver the patient to the hospital in a shorter time than the ground unit based on the time that the patient is ready for transport.

This decision should be based on the following formula:

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\text{___ minutes for ETA of the helicopter to the scene} \\
+ \text{___ minutes for air transport time to the hospital} \\
+ \text{10 minutes for loading/unloading/transfer of patient to ED} \\
= \text{___ ETA to hospital for the helicopter}
\]
3. Any one or more of the following patient conditions:
   a. Medical-related complaints:
      1) Hypotension/shock (non-traumatic)
      2) Snake bite with signs of significant envenomation
      3) Unstable near drowning
      4) Status epilepticus refractory to medications
      5) Cardiovascular instability (chest pain with dysrhythmias or post-resuscitation)
      6) Critical burns or electrical burns
      7) Critical respiratory patients (use caution with altitude)
      8) SCUBA-related emergencies or barotrauma (use caution with altitude)
      9) Any other medical problems in areas inaccessible to, or with prolonged ETA times, for responding ground units
      10) Other conditions subject to the approval of the BH physician or the highest medical authority on-scene
   b. Traumatic injuries – Patients with traumatic injuries who are to be transported by helicopter shall be triaged prior to transport according to VCEMS Policy 1405 (Trauma Triage and Destination Criteria)
      1) Trauma Step 1-3 criteria:
         a) All trauma patients to be transported by helicopter that meet Step 1-3 criteria SHALL be transported to a designated trauma center
         b) Helicopter personnel may determine on a case-by-case basis which trauma center is the closest and most appropriate destination
         c) BH contact with the destination trauma center shall be initiated by the caregiver(s) staffing the helicopter and coordination with the ground units.
         d) On rare occasion, the most appropriate destination hospital may be outside the county. However, it is preferred that trauma patients involved in incidents
within Ventura County are transported to a designated Ventura County trauma center

2). Trauma Step 4 criteria:
   a) An on-scene paramedic shall contact the base hospital in whose catchment area the incident occurred
   b) A BH order is **required** for all patients meeting Step 4 criteria, unless the patient is located within an inaccessible area or if patient transport will be prolonged
   c) If the patient is directed other than to the regular catchment base hospital, the MICN will notify the receiving hospital or trauma center of an inbound patient and relay paramedic report

   c. Mass Casualty Incidents (MCI) or multi-patient incidents
      1) Helicopter transport may be utilized during MCI responses
      2) Patient transport should be coordinated by the BH and on-scene personnel
      3) Patients transported by helicopter should be taken to a farther facility, allowing for ground providers to transport patients to the closer facilities

C. Contraindications to transport
   1. Patients contaminated with hazardous materials regardless of decontamination status.
   2. Violent or potentially violent patients who have not been chemically restrained.
   3. Stable patients (except in backcountry areas inaccessible to ground units or if patient transport will be prolonged)
   4. When ground transport time is equal to or shorter than air transport time

D. Relative contraindications to transport
   1. Asystole, not responding to appropriate therapy and not meeting any criteria of an exceptional situation (e.g., cold water drowning, lightning strike or electrocution)
   2. Transports from heavily populated areas
3. Transports for which, prior to departing the scene, conditions exist such that helicopter arrival at the intended destination is uncertain

4. Other safety conditions as determined by pilot and/or flight crew

E. Information about the patient(s) condition, level of medical personnel staffing the helicopter, and ambulance staffing is reviewed by medical and public safety personnel.

F. BH contact should be attempted to establish standard medical control. If ALS personnel are unable to establish BH contact, Communication Failure Protocols should be followed per VCEMS Policy 705.

G. Provider agencies which utilize medical flight crew members who have an expanded scope of practice beyond the Paramedic scope of practice (MD or RN) may utilize specific treatments/procedures only upon prior written approval by the VCEMS Agency. In such cases, notification to the receiving hospital shall be made and BH medical direction is not required.

H. Staffing decision for transport will be determined jointly by the BH (if BH contact is established) and on-scene personnel

1. A minimum of a paramedic (Level II) must accompany the patient if ALS procedures are initiated and no physician is present.

   a. Exception - In a MCI situation, a patient who has had an IV started that does not contain any additives may be transported by an EMT.

2. Destination will be determined by the pilot and flight crew, taking into consideration the patient(s) condition, flight conditions, and any other factors necessary

I. Complications during patient transport via helicopter:

1. If a helicopter is transporting a patient to the hospital and is unable to complete the transport due to weather, mechanical/safety issues, or any other factor that was impossible to predict prior to the helicopter lifting from the scene, the helicopter will notify FCC as soon as possible to arrange an alternate LZ and for a ground ambulance to rendezvous with the helicopter

2. Medical personnel staffing the helicopter shall retain responsibility for patient care until transfer of care to ground ambulance personnel is accomplished. If the final destination for the helicopter was to be a
trauma center, ground personnel shall complete the transport to the designated trauma center within that catchment area.