Training Bulletin

Field Trauma Triage and Air Ambulance Utilization Standards

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Emergency Health Services Branch
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Field Trauma Triage and Air Ambulance Utilization Standards

Introduction

The Ministry of Health and Long-Term Care, Emergency Health Services Branch has completed a review and made revisions to the *Field Trauma Triage Standard* based on recommendations that were developed by Centers for Disease Control and Prevention (CDC). During the process of this review, a number of revisions to the *Air Ambulance Utilization Standard* were subsequently made. The Standards have been endorsed by Emergency Health Services Branch stakeholders including Medical Advisory Committee (MAC), Ontario Base Hospital Group (OBHG), Ornge and Ontario Association of Paramedic Chiefs (OAPC). The Ontario Trauma Advisory Committee (OTAC) has also collaborated on the review and revision to these Standards.

The *Field Trauma Triage Standard* has been separated from the *Air Ambulance Utilization Standard* to become a separate standard. This standard will replace the existing *Field Trauma Triage Guidelines* which were previously found in the *Air Ambulance Utilization Standard* in *Section 1, General Standard of Care* of the 2007 *Basic Life Support Patient Care Standards* (*BLS PCS*).

These new standards will be incorporated into the next revision of the *BLS PCS.* Copies of the new *Field Trauma Triage Standard* (including the flowchart) and the revised *Air Ambulance Utliziation Standard* have been included in the Appendices of this bulletin. This flowchart will be made into a laminated reference document which will be available to all paramedics in Ontario. This training bulletin has been developed to identify areas where significant changes have been made to content and to provide rationale for the changes.

Field Trauma Triage Standard

The *Field Trauma Triage Standard* has been redesigned to include a four (4) step decision process:

- Step One Physiological
- Step Two Anatomical
- Step Three Mechanism of Injury
- Step Four Special Considerations

When evaluating these factors the *Field Trauma Triage Standard* covers the ‘Yes’ or ‘No’ options (see flowchart) to provide clarification on applicable destinations. If the patient does not meet any of the identified criteria in a Step then the paramedic’s evaluation moves on to the next Step.

Step One - Physiological

In Steps 1 and 2, the most severely injured patients are identified. Step 1 is to allow for measurement of a critically injured trauma patient's level of consciousness and vital signs. These indicators directly demonstrate with high predictive value the severity of injury and the need to be transported to a LTH for a higher level of care.[1]

These patients should be transported preferentially to a LTH. If a paramedic is unable to successfully manage the airway or the patient is unlikely to survive transport to the LTH, the patient must be transported to the closest Emergency Department (ED).

Step Two – Anatomical

Step 2 is the assessment of patients that have normal physiological criteria however they have anatomic and vascular injuries that require a higher level of care delivered preferentially by a LTH.

Patients with penetrating trauma to the torso or head/neck are to be transported to a LTH for higher level of surgical care, and the 30 minutes transport time rule in this case is independent of lack of vitals signs. This means that should this type of patient arrest en route, paramedics should keep going to the LTH.

When appropriate, the paramedic will consider using the Trauma (TOR) Termination of Resuscitation contained in the *Trauma Cardiac Arrest Medical Directive*. There is a Mandatory Provincial Patch Point in this Directive that requires BHP authorization to apply the TOR. If the BH patch fails or a trauma TOR is not authorized, then the patient should be transported to the closest ED following the first analysis/shock. CACC/ACS will authorize the transport once notified of the patient's need for re-direct or transport under the *Field Trauma Triage Standard*.

Step Three – Mechanism

The mechanism of injury (MOI) should be evaluated as the injury may appear occult but actually be more severe. The evaluation of the MOI through paramedic judgement will also assist in determining if the patient should be transported to a LTH. This particular factor helps to reduce the chances of under triage. MOI was found to be a key indicator of mortality and functional impairment of blunt force trauma patients.[1]

Recent advances in automotive technology have resulted in some vehicles being equipped with Advanced Automatic Collision Notification (AACN). Where available, vehicle telemetry data can be a useful tool that may be relayed to paramedics. At this time, it has been included in the Standard for areas where this technology may be available. As this technology becomes more widespread, local destination protocols will evolve to provide direction to paramedics.

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[1] CDC, National Center for Injury Prevention and Control, Division of Injury Response, *Recommendations from the Expert Panel: Advanced Automatic Collision Notification and Triage of the Injured Patient,* 2008 www.cdc.gov/injuryresponse/pdf/AACN%20Report_FINAL-a.pdf

Vehicle telemetry is a combination of telematics and computing that integrates the vehicle's electrical architecture, cellular communication, GPS systems and voice recognition systems. It can identify the exact location of a crash and can enable communication with the vehicle occupants.[2] The vehicle telematics can provide key injury information to call centre providers regarding change in velocity, where the impact has occurred, seatbelt usage, whether multiple impacts occurred, air-bag deployment, roll-over status and vehicle make and model. All of these factors can be relayed to Ambulance Communications Centers and then to paramedics to help better predict the severity of injury and what facility would be the most appropriate destination.[1and 2]

Step Four – Special Considerations

Patients may have underlying conditions that could put them at a greater risk for severe injury. Patients who meet any of these criteria are recommended to be transported to a LTH or to a hospital that is capable of a complete evaluation and timely treatment.

Criteria used for bypass to a LTH in Steps 3 and 4 are not absolute; rather they are indicators of the potential for significant injury or indicates the patient may require other support services at the LTH. Not all patients in these two categories require transport to a LTH. Rather, Steps 3 and 4 are designed to identify patients who may not present with significant injuries but may lack the ability to compensate well and have the potential to deteriorate quickly.

The paramedic must use their judgement coupled with these criteria to determine the need for transport to a LTH once they have completed their evaluation. Local variances in transport time may occur based on traffic, time of day, weather and the use of appropriate Patient Priority Bypass Agreements (e.g. burns, amputations, pediatrics and rural/remote trauma) which can be used to help determine transport destination. If the criteria have not been met, then the patient should be transported to the closest most appropriate ED.

[2] Public Safety Communications, an APCO International Publication, Advanced Automatic Collision Notification & Triage of the Injured Patient, December 01, 2010, http://psc.apcointl.org/2010

Air Ambulance Utilization Standard

In *Section 1* of the *BLS PCS, General Standards of Care*, the *Air Ambulance Utilization Standard* has been revised. The standard is still in keeping with the overall objective of air ambulance response but the content has been revised as follows, into a more logical sequential format.

Requests for an air ambulance response should be considered according to the following criteria:

A. Criteria for On-Scene Response
   1. Operational Guidelines
   2. Clinical Guidelines
   3. Other Considerations

B. Requesting an On-Scene Response

C. Helicopter Landing Site Safety and Coordination
   1. Wear Safety Apparel
   2. Landing Site Selection
   3. Site Safety
   4. Safely Working Around a Helicopter

D. Other Use of Helicopters

A. Criteria for On-Scene Response

Trauma scene response was the primary reason for the implementation of rotors into EMS. Rotor wing response to scene calls is referred to as HEMS (Helicopter EMS).

There is evidence as to the benefit of HEMS response to patients with severe traumatic injuries. Several recent studies have reinforced that utilization of HEMS response to patients with severe traumatic injuries reduces the risk of death.[3]

HEMS response to trauma scene calls may result in mortality reduction as this can involve a reduction in time to definitive care (shorter times to arrival at the trauma centre), and possible clinical interventions provided by HEMS clinical teams.

[3] Association Between Helicopter vs Ground Emergency Medical Services and Survival for Adults with Major Trauma. JAMA, April 18, 2012 – Vol 307. No. 15:1602-1610
http://jama.jamanetwork.com/article.aspx?articleid=1148152

There are multiple factors involved in determining which patients will benefit the most from HEMS trauma response which include the following:

1. **Injury severity**: The key to improving the clinical impact, reducing mortality, and improving cost-effectiveness of HEMS trauma response is ensuring that its utilization is only for severely injured patients.

2. **Time**: The patient group that receives benefit from HEMS response is those at longer distances from trauma centres for which the rotor significantly reduces the time to definitive care.

3. **Clinical care**: Trauma patients in jurisdictions with Primary Care Paramedic (PCP) level of care will potentially be provided benefit from a HEMS response with an increased level of care.

In terms of HEMS medical scene response to patients, two patient groups have been studied: STEMI patients and stroke patients. Both of these involve clinical conditions in which there is a distinct clinical benefit and mortality reduction when provided with timely intervention. Benefit is only provided by HEMS response if the rotor wing can deliver the patient to an appropriate centre within the time frame required and faster than land EMS.

Other patient groups that receive benefit from HEMS medical scene response are those in very remote areas with no access to land EMS.

Based on this, significant changes have been made to this section and the previous bulleted list of Field Trauma Triage Guidelines were removed and are now a separate standard. The Clinical Guidelines are more definitive pertaining to shock and acute stroke. Environmental Conditions have been removed. In the Obstetrical conditions, pre-eclampsia/eclampsia and premature labour (gestation less than 36 weeks) have been removed as indications for helicopter scene response.

Transport time has been defined as the time from depart scene to time of arrival at the destination. The 30 minutes is an approximation only. This takes into account traffic, road and weather conditions and those factors which affect transport time and cannot be predetermined. It should be noted that extrication time is no longer included in the definition of transport time.

B. Requesting an On-Scene Response

This section includes new direction for rendezvous with an air ambulance crew. Land ambulance paramedics can only deviate from the direct route to the hospital to rendezvous with air if: 1) the air ambulance is able to land along the direct route of the land ambulance and 2) it would result in a significant reduction in transport time to the most appropriate hospital/LTH. The time involved to coordinate the landing site location and transfer of the patient need to be taken into consideration. If these criteria are not met, land ambulance paramedics will meet with the air ambulance paramedics either on scene or at the closest ED as a 'modified scene response'.

Should paramedics arrive at a hospital with the patient and the air ambulance has already landed, paramedics are to proceed to the ED where the patient will be assessed by the ED physician along with the air ambulance crew. Having the patient assessed in a controlled ED environment jointly by the ED physician is in the best interest of patient safety. This ensures that the patient meets the Clinical Guidelines and is fit for flight.

C. Helicopter Landing Site Safety and Coordination

The title of this section has changed. Now listed in this section, upon confirming that the helicopter is responding, the land ambulance paramedic will designate a Landing Site Coordinator. The Landing Site (see 2.b) has been changed to a clear area of approximately 45 metres x 45 metres. This had previously been stipulated as 30 metres x 30 metres.

D. Other Use of Helicopters

The changes in this section include the definition of 'Search and Rescue'. This definition is more comprehensive and clearly outlines that this activity is outside the scope of EMS practice. Additionally, the operations criteria to Ornge Communications and on-scene highest medical authority have been removed from this standard.

Conclusion

The revisions to the *Field Trauma Triage Standard* and the *Air Ambulance Utilization Standard* presented in this Training Bulletin are based on expert evidence-based medical opinion. The intention of these revisions is to improve the outcomes of severely injured trauma patients by providing paramedics with the necessary criteria to apply when assessing trauma patients in the prehospital environment and determining the most appropriate receiving facility.

Appendix A

Field Trauma Triage Standard and Flowchart

Field Trauma Triage Standard

Paramedics need to follow the steps below when conducting field triage of injured patients. These steps will also be used to assess the clinical criteria (i.e. to determine if the patient meets the clinical guidelines) as required by the *Air Ambulance Utilization Standard.*

Steps 1 and 2 have been designed to identify the most seriously injured patients.

CACC/ACS will authorize the transport once notified of the patient's need for re-direct or transport under the *Field Trauma Triage Standard*.

A flowchart has also been included within this Standard for reference purposes.

STEP 1: Physiological

Patients should be transported directly to a Lead Trauma Hospital (LTH) if it is <30 minutes land ambulance transport time and if any of the following criteria have been met:

- GCS <14 with evidence of trauma or a traumatic mechanism
- Systolic blood pressure <90mmHg
- Respiratory rate <10 or ≥30 breaths per minute or need for ventilatory support (<20 in infant aged < 1 year)

Transport time is defined as time from depart scene to time arrive at destination.

Note: 30 minutes is an approximation and refers to transport time only. Traffic and road/weather conditions and those factors which affect response/transport time cannot be predetermined.

These patients should be transported preferentially to a LTH. If a paramedic is unable to successfully manage the airway or the patient is unlikely to survive transport to the LTH, the patient must be transported to the closest Emergency Department.

If these criteria have not been met, proceed to Step 2.

STEP 2: Anatomical

Additionally, patients should be transported directly to a LTH if it is <30 minutes land ambulance transport time and if any of the following criteria have been met:

- All penetrating injuries to head, neck, torso and extremities proximal to elbow or knee. **Note:** Patients with penetrating trauma to the torso or head/neck are to be transported to a LTH with the 30 minute transport rule independent of lack of vital signs.
- Chest wall instability or deformity (e.g. flail chest)
- Two or more proximal long-bone fractures
- Crushed, de-gloved, mangled or pulseless extremity
- Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis

These patients should be transported preferentially to a LTH. The paramedic will consider using the Trauma Termination of Resuscitation (TOR) contained in the *Trauma Cardiac Arrest Medical Directive* when appropriate.

If these criteria have not been met, proceed to Step 3.

STEP 3: Mechanism

The criteria used for bypass to a LTH in Steps 3 and 4 are not absolute; rather are indicators of the potential for significant injury or indicate the patient may require other support services at the LTH. Not all patients in these two categories require transport to a LTH and the paramedic must use their judgement coupled with these criteria to determine the need for transport to a LTH.

Patients may be transported to a LTH if any of the following criteria have been met. Patching with the base hospital physician is an option.

1) Falls
   a) Adults ≥6 metres (one story is equal to 3 metres)
   b) Children (age <15) ≥3 metres or two to three times the height of the child

2) High Risk Auto Crash
   a) Intrusion ≥0.3 metres occupant site; ≥0.5 metres any site, including the roof
   b) Ejection (partial or complete) from automobile
   c) Death in the same passenger compartment
   d) Vehicle telemetry data consistent with high risk injury (if available)

3) Auto vs. pedestrian/bicyclist thrown, run over or with significant (≥30 km/h) impact

4) Motorcycle crash ≥30 km/h

If these criteria have not been met, proceed to Step 4.

STEP 4: Special Consideration

Patients may be transported to a LTH if any of the following criteria have been met. Paramedic judgement and local Patient Priority Systems Bypass agreements can be used to help determine transport destination. Local variances in transport time may occur based upon appropriate Patient Priority Bypass Agreements (e.g. burns, amputation, pediatrics, rural/remote trauma). Patching with the base hospital physician is an option.

1) Age
   - Older adults
     a) Risk of injury/death increases after age 55
     b) SBP <110 may represent shock after age 65
   - Children
     a) Should be triaged preferentially to a pediatric-capable trauma centre

2) Anticoagulation and bleeding disorders

3) Burns
     a) With trauma mechanism: triage to LTH

4) Pregnancy ≥20 weeks

If these criteria have not been met, transport the patient to the closest most appropriate Emergency Department.

Field Trauma Triage Standard

STEP ONE
Physiological

Measure vital signs and level of consciousness

Glasgow Coma Scale	<14 with evidence of trauma or a traumatic mechanism
Systolic blood pressure	<90 mmHg
Respiratory rate	<10 or ≥30 breaths per minute or need for ventilatory support (<20 in infant aged <1 year)

YES

Take directly to a LTH if it is <30 minutes land ambulance transport time[1]. Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to a LTH[2].

NO

Assess anatomy of injury.

STEP TWO
Anatomical

- All penetrating injuries[3] to head, neck, torso and extremities proximal to elbow or knee
- Chest wall instability or deformity (e.g. flail chest)
- Two or more proximal long-bone fractures
- Crushed, de-gloved, mangled or pulseless extremity
- Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fracture
- Paralysis

YES

Take directly to a LTH if it is <30 minutes land ambulance transport time. Steps 1 and 2 attempt to identify the most seriously injured patients. These patients should be transported preferentially to a LTH[4].

NO

Assess mechanism of injury and evidence of high energy impact.

See page 2

1. Transport time is defined as time from depart scene to time arrive at destination.
2. If a paramedic is unable to successfully manage the airway or the patient is unlikely to survive transport to the LTH, the patient must be transported to the closest Emergency Department.
3. Patients with penetrating trauma to the torso or head/neck are to be transported to a LTH with the 30 minute transport rule independent of lack of vital signs.
4. The paramedic will consider using the Trauma Termination of Resuscitation (TOR) contained in the *Trauma Cardiac Arrest Medical Directive* when appropriate.

Field Trauma Triage Standard

STEP THREE
Mechanism[5]

1) Falls
    a) Adults ≥6 metres (one story is equal to 3 metres)
    b) Children (age<15) ≥3 metres or two or three times the height of the child
2) High Risk Auto Crash
    a) Intrusion ≥0.3 metres occupant site; ≥0.5 metres any site, including the roof
    b) Ejection (partial or complete) from automobile
    c) Death in same passenger compartment
    d) Vehicle telemetry data consistent with high risk injury (if available)
3) Auto vs. pedestrian/bicyclist thrown, run over, or with significant (≥30 Km/h) impact
4) Motorcycle crash ≥30 Km/h

YES → Transport to a LTH. Patching with the base hospital physician is an option.

NO → Assess special patient or system considerations.

STEP FOUR
Special Consideration[5]

1) Age
    - Older Adults
        a) Risk of injury/death increases after age 55
        b) SBP <110 may represent shock after age 65
    - Children
        a) Should be triaged preferentially to pediatric-capable trauma centre
2) Anticoagulation and bleeding disorders
3) Burns
    a) With trauma mechanism: triage to LTH
4) Pregnancy ≥20 weeks

YES → Transport to a LTH. Paramedic judgement and local Patient Priority Systems Bypass agreements[6] can be used to help determine transport destination. Patching with the base hospital physician is an option.

NO → Transport to the closest most appropriate ED.

5. The criteria used for bypass to a LTH in Steps 3 and 4 are not absolute; rather are indicators of the potential for significant injury or indicate the patient may require other support services at the LTH. Not all patients in these two categories require transport to a LTH and the paramedic must use their judgement coupled with these criteria to determine the need for transport to a LTH.

6. Local variances in transport time may occur based upon appropriate Patient Priority Bypass Agreements.

Appendix B

Air Ambulance Utilization Standard

Air Ambulance Utilization Standard

A. Criteria for On-Scene Response

Requests for an on-scene air ambulance response should meet at least one of the bulleted **Operational Guidelines** plus one of the **Clinical Guidelines** (e.g. known clinical conditions as listed in the *Field Trauma Triage Standard* or from the bulleted list of Medical or Obstetrical conditions).

1. Operational Guidelines:

- The land ambulance requires more than 30 minutes to reach the scene and the air ambulance can reach the scene quicker;
- The land ambulance requires more than 30 minutes to travel from the scene to the closest appropriate hospital***** and the air ambulance can reach the scene and transport the patient to the closest appropriate hospital***** quicker than the land ambulance;
- The estimated response for both land and air is greater than 30 minutes, but approximately equal, and the patient needs advanced paramedic level care which cannot be provided by the responding land ambulance;
- There are multiple patients who meet the Clinical Guidelines and the local land ambulance resources are already being fully utilized.

*****Closest appropriate hospital for on-scene call patients assessed as meeting the criteria specified within the *Field Trauma Triage Standard* is the closest Lead Trauma Hospital (LTH).

Note: 30 minutes is an approximation and refers to transport time only. Traffic and road/weather conditions and those factors which affect response/transport time cannot be predetermined.

2. Clinical Guidelines:

Known Clinical Conditions

a) Patients meeting the conditions listed in the *Field Trauma Triage Standard*.

b) Patients meeting any one of the following conditions:

Medical:

- Shock, especially hypotension with altered mentation (e.g. suspected aortic aneurysm rupture, massive GI bleed, severe sepsis, anaphylaxis, cardiogenic shock, etc.)
- Acute stroke with time of onset <3.5h
- Altered level of consciousness (GCS <10)
- Acute respiratory failure or distress
- Suspected AMI or potentially lethal dysrhythmia
- Resuscitation from respiratory or cardiac arrest
- Status epilepticus
- Unstable airway or partial airway obstruction.

Obstetrical:

- Active labour with abnormal presentation (i.e. shoulder, breech or limb)
- Multiple gestation and active labour
- Umbilical cord prolapsed
- Significant vaginal bleeding (suspected abruptio placenta or placenta previa or ectopic)

3. Other Considerations

1. If in the judgement of the paramedic or ambulance communications officer (ACO) an on-scene air ambulance response is appropriate based on 1) the perceived severity of the reported injuries and without confirmation that the clinical guidelines have been met or 2) the patient cannot reasonably be reached by land ambulance (e.g. sites without road access such as islands; geographically isolated places, etc.), an air ambulance response may be requested.

B. Requesting an On-Scene Response

1. The paramedic will provide the ACO with the operational and clinical guidelines identified. Also, in order for the ACO to determine if an air ambulance response and transport will be quicker than land ambulance, the paramedic will provide the ACO with the estimated time to prepare the patient for transport, identify separately any time required for patient extrication, the estimated land ambulance driving time to the closest appropriate hospital* and any additional information as required.

2. Land ambulance paramedics will not delay patient transport by waiting for the air ambulance, unless the air ambulance can be seen on its final approach to the scene. If the air ambulance is en route but not on final approach to the scene, and the land paramedics have the patient in their ambulance, then the land ambulance will proceed to the closest local hospital with an emergency department. The air ambulance will proceed to that local hospital and, IF APPROPRIATE, assist hospital personnel prepare the patient for rapid evacuation to the most appropriate hospital / Lead Trauma Hospital (LTH).

3. While en route to the local hospital, paramedics may rendezvous with the air ambulance if 1) the air ambulance is able to land along the direct route of the land ambulance and 2) it would result in a significant reduction in transport time to the most appropriate hospital / LTH.

4. If the call's circumstances and patient(s) fail to meet the guidelines and an air ambulance is known to be responding based on the merits of the initial request for ambulance service, the paramedic will contact the CACC/ACS and advise that an on-scene response is not required and why.

C. Helicopter Landing Site Safety and Coordination

Upon confirmation that the helicopter is responding, the paramedic will designate a Landing Site Coordinator. One rescuer (selected from the police, fire, or ambulance personnel) should be chosen to assume the role of Landing Site Coordinator and take the following actions to coordinate the safe landing of the helicopter while maintaining the safety of the scene:

1. Wear Safety Apparel

a) Don and secure a high visibility vest or coat;
b) Don and secure a safety helmet with visor;
c) Wear safety goggles or safety eyewear.

2. Landing Site Selection

The helicopter's pilot-in-command is responsible for selecting the landing site and has the final decision on whether or not to land. Using the helicopter's airborne vantage point, the pilot-in-command will select a site that best meets the following conditions:

a) A site that will not affect the rescue efforts underway;
b) A clear area of approximately 45 metres x 45 metres;
c) A safety area, extending approximately an additional 30 metres for the purpose of controlling vehicle and personnel access during landing and take-off;
d) The landing site should be away from overhead wires and utility poles;
e) The surface should be as flat as possible;
f) No loose debris should be within the landing site or the safety area; check ditches;
g) Gravel and sand sites should be avoided, if possible, due to the potential of injury from flying dust particles and reduced visibility.

3. Site Safety

a) No vehicles or personnel are allowed within the landing site and safety area during landing and take-off;
b) Vehicle doors and access compartments should be closed;
c) Stretchers should be left in the ambulance and all loose articles secured;
d) If requested by the flight crew, the Landing Site Coordinator will stand at the upwind edge of the safety area, back to the wind and facing the site, to maintain security during landing and take-off;
e) Firefighters should not lay out hoses; any lines that have been laid should be charged;
f) If site security is compromised, such as personnel or vehicles entering the safety area, the Landing Site Coordinator is to wave off the helicopter by crossing outstretched arms over their heads.

4. Safely Working Around a Helicopter

a) Stay out of the safety area and landing site during landing and take-off;
b) Approach or depart only when directed by a member of the air crew;
c) Do not approach the helicopter from the rear as the tail rotor is difficult to see;
d) If on uneven ground, approach or depart from the downhill side;
e) Carry all equipment horizontally at or below waist level, never over shoulder;
f) Ensure hats, scarves, gloves, glasses and any other loose articles are secure before entering the safety area.

D. Other Use of Helicopters

1. The helicopter will not be permitted to respond to night calls which require a landing at a site other than night licensed airports, helipads or night approved remote landing sites.

2. Helicopters will not be permitted to conduct search and rescue calls. For purposes of this section, Search and Rescue is defined as "The act of looking diligently to find a patient whose exact location is not known, and, once located, requires removal from the location using specialized tools and skills outside the scope of EMS practice."

3. a) In those cases where land ambulance can reach the patient(s) and an on-scene response by air ambulance is appropriate, the ACO will assign a land ambulance and continue the land response until the flight crew requests that the land ambulance be cancelled.

   b) In those cases where land ambulance arrives on scene prior to the air ambulance, paramedics shall inform the CACC/ACS as clinical events occur.