ODEMSA
Regional Air Medical Evacuation Guidelines

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2021

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Members of the Old Dominion EMS Alliance (ODEMSA) Air Medical Committee oversee this plan as a cohesive team. The objective is to bring together elements of the central Virginia EMS System to help provide the ODEMSA region with excellent emergency care through the use of rotor-wing and fixed-wing aircraft and trained critical care crews in transporting patients to centers of definitive emergency care. All ODEMSA policies, procedures, and guidelines in this plan have received final approval from the ODEMSA Board of Directors.

Revised/Approved: January 2021

Regional Guidelines for Emergency Air Medical Evacuation

The Old Dominion EMS Alliance (ODEMSA) is fortunate to have the availability of multiple air medical resources within the Central Virginia region that provide care and air transport for patients throughout the ODEMSA region. There are multiple medevac agencies surrounding the ODEMSA regions which serve as secondary resources should the need arise.

The Air Medical Committee's objective is to bring together elements of the central Virginia EMS System to help provide the ODEMSA region with excellent emergency care through the use of rotor-wing and fixed-wing aircraft and trained critical care crews in transporting patients to centers of definitive emergency care. In keeping with the goals and values as adopted by the Air Medical Committee, all policies and protocols related to the air medical evacuation of patients have been reviewed by the committee members. The Committee has developed general guidelines for both hospital and pre-hospital agencies located within the region. It is their recommendation that these items be reviewed and that all Emergency Communications Centers (ECCs) update their databases with the current contacts of each air medical resource as listed in these documents.

General Guidelines:

The transport of patients from the scene, including the mode of transportation, should be in line with State Criteria for Air Medical Transport as contained in the State Trauma Triage Plan, reproduced on Page 5 of the ODEMSA Regional Trauma Triage Plan, and included as *Attachment A*.

A suggested Air Medical Resource List Matrix is provided by ODEMSA in *Attachment B*. It is strongly recommended that requests for air medical resources be made through the city/county ECC.

The transfer of patients from local hospitals will continue to utilize existing partnerships or agreements. When the primary aircraft is unavailable, each of the air medical dispatch centers in the region has agreed to coordinate the response of the next closest appropriate air medical resource.

The centers are working with ODEMSA in providing seamless dispatch of the primary and any secondary aircraft required. The dispatch numbers for these resources are as follows:

Virginia State Police Med-Flight I
7411 Airfield Dr.
North Chesterfield, VA 23237
1 (800) 468-8892

HCA Virginia Air Care Eagle
7101 Jahnke Rd
Richmond, VA 23225
1 (855) 823-2453

VCU LifeEvac 1
23301 Airport Rd
Petersburg, VA 23803
1 (877) 902-7779

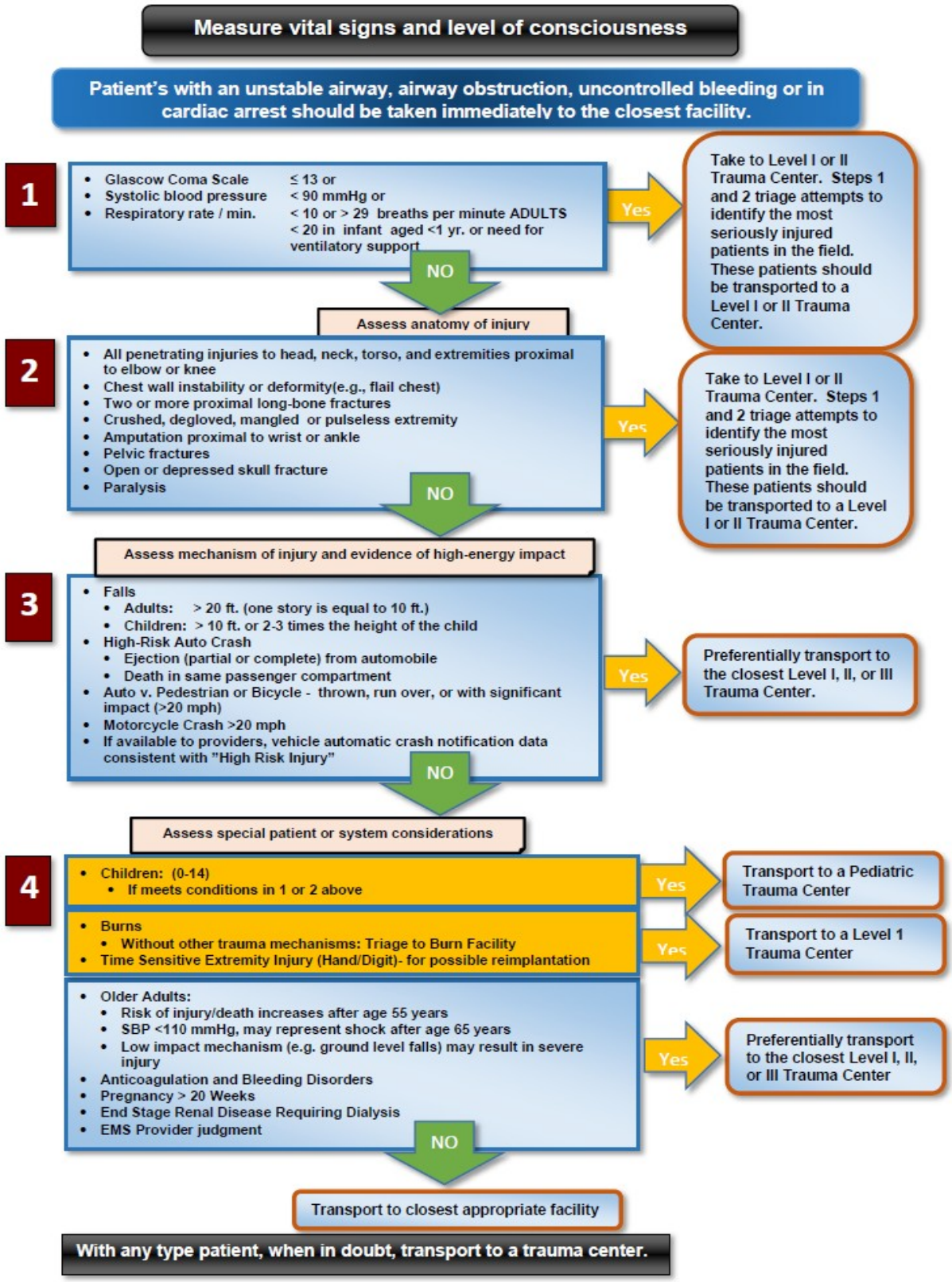
VCU LifeEvac 3
345 Tailwind Lane
Mattaponi, VA 23110
1 (877) 902-7779

The ODEMSA Air Medical Committee meets quarterly. Please refer to the ODEMSA website for the current schedule www.odemsa.vaems.org or contact ODEMSA at 804-560-3300 if you have any questions or suggestions.

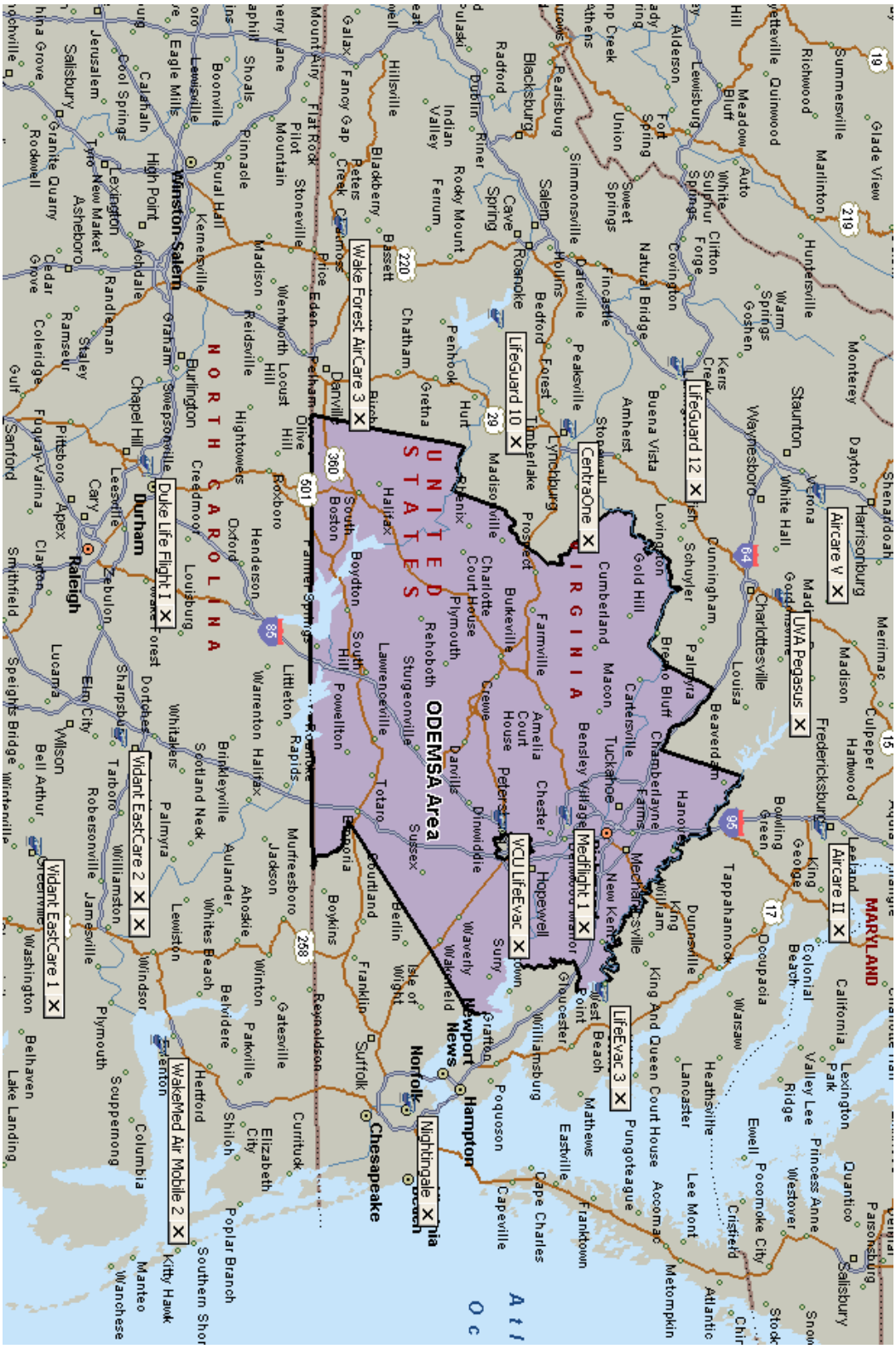
Resource Attachments:

Attachment A: Field Triage Decision Schematic
Attachment B: Services Map
Attachment C: Air Medical List Matrix
Attachment D: State Criteria for Air Medical Transport
Attachment E: Guidelines for the STEMI & Stroke Patient
Attachment F: Recommendations for Receiving Hospital Helipad Ops

Attachment A Field Triage Decision Schematic



Attachment B: Services Map



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Attachment C: Air Medical List Matrix*

	AMELIA COUNTY		BRUNSWICK COUNTY		BUCKINGHAM COUNTY	
	Air Resource	**Distance**	**Air Resource**	**Distance**	**Air Resource**	**Distance**
1	Med-Flight 1	23	VCU LifeEvac 1	30	Pegasus	38
2	ACE	24	Duke LifeFlight	38	Centra 1	~~41~~
3	VCU LifeEvac 1	25	Med Flight 1	42	Med-Flight 1	~~50~~
3	VCU LifeEvac 3	60	Vidant Air 3	72	ACE	50
4	Pegasus	53	ACE	48	Air Care 5	45
4	Duke LifeFlight	65	VCU LifeEvac 3	70	Life-Guard 12	45
5	Centra 1	58	Centra 1	83	VCU LifeEvac 1	55
6	Aircare 2	61				

	CHARLES CITY COUNTY		CHARLOTTE COUNTY		CHESTERFIELD COUNTY	
	Air Resource	**Distance**	**Air Resource**	**Distance**	**Air Resource**	**Distance**
1	VCU LifeEvac 3	19	Centra 1	38	Med-Flight 1	0
2	Med-Flight 1	22	Duke LifeFlight	44	ACE	7
3	VCU LifeEvac 1	23	VCU Life Evac 1	56	VCU LifeEvac 1	12
4	ACE	24	Med Flight 1	57	VCU LifeEvac 3	37
5	Nightingale	47	Life-Guard 10	52	Aircare 2	53
6	Aircare 2	59	ACE	60	Pegasus	63
7	ACE		Life-Guard 12	58	Duke LifeFlight	84

	CUMBERLAND COUNTY		DINWIDDIE COUNTY		GOOCHLAND COUNTY	
	Air Resource	**Distance**	**Air Resource**	**Distance**	**Air Resource**	**Distance**
1	ACE	34	VCU LifeEvac 1	0	ACE	20
2	Med-Flight 1	35	Med-Flight 1	19	Med-Flight 1	23
3	VCU LifeEvac 1	40	ACE	26	VCU LifeEvac 1	25
4	Pegasus	44	VCU LifeEvac 3	58	Pegasus	41
5	Centra 1	55	Nightingale	75	Aircare 2	41
6	Aircare 5	57	Aircare 2	72	VCU LifeEvac 3	54
7	Aircare 2	59	Pegasus	85		

	GREENSVILLE COUNTY		HALIFAX COUNTY		HANOVER COUNTY	
	Air Resource	**Distance**	**Air Resource**	**Distance**	**Air Resource**	**Distance**
1	VCU LifeEvac 1	31	Duke LifeFlight	34	ACE	17
2	Med-Flight 1	43	Centra 1	41	Med-Flight	22
3	ACE	49	Life Guard 10	50	VCU LifeEvac 3	32
3	Duke LifeFlight	49	UNC	60	VCU LifeEvac 1	35
4	Vidant Air 3	65	Life-Guard 12	66	Aircare 2	31
5	Nightingale	61	VCU LifeEvac 1	73	Pegasus	56
6	VCU LifeEvac 3	71	Med-Flight 1	77		
7			ACE	81		

Air Medical List Matrix (Continued)

	HENRICO COUNTY		LUNENBURG COUNTY		MECKLENBURG COUNTY	
	Air Resource	**Distance**	**Air Resource**	**Distance**	**Air Resource**	**Distance**
1	ACE	7	Duke	38	Duke	21
2	Med-Flight 1	12	VCU LifeEvac 1	40	VCU LifeEvac	52
3	VCU LifeEvac 1	26	Med-Flight 1	44	Med-Flight	60
4	VCU LifeEvac 3	34	ACE	48	Centra 1	56
5	Air Care 2	39	Centra 1	50	ACE	65
6	Pegasus		Life-Guard 10	70	Vidant Air 3	80
7			Pegasus	72	UNC	55

	NEW KENT COUNTY		NOTTOWAY COUNTY		POWHATAN COUNTY	
	Air Resource	**Distance**	**Air Resource**	**Distance**	**Air Resource**	**Distance**
1	VCU LifeEvac 3	13	VCU LifeEvac 1	28	ACE	18
2	Med-Flight 1	26	Med-Flight 1	31	Med-Flight 1	19
3	ACE	26	ACE	35	VCU Life Evac 1	29
4	VCU LifeEvac 1	32	Pegasus	63	Pegasus	44
5	AirCare 2	50	Centra	55	AirCare 2	49
6	Nightingale		VCU LifeEvac 3	75	VCU LifeEvac 3	55

	PRINCE EDWARD COUI Y		PRINCE GEORGE COUNTY		SURRY COUNTY	
	Air Resource	**Distance**	**Air Resource**	**Distance**	**Air Resource**	**Distance**
1	Med Flight 1	41	VCU LifeEvac 1	12	VCU LifeEvac 3	24
2	Centra 1	39	Med-Flight 1	17	VCU LifeEvac 1	33
3	ACE	43	ACE	21	Med-Flight 1	36
4	VCU LifeEvac 1	43	VCU LifeEvac 3	31	Nightingale	30
5	Pegasus	51	Nightingale	52	ACE	40
6	Life-Guard 12	58	Aircare 2	63	AirCare 2	74
7	Life-Guard 10	64				

	SUSSEX COUNTY	
	Air Resource	**Distance**
1	VCU LifeEvac 1	20
2	Med-Flight 1	31
3	ACE	37
4	VCU LifeEvac 3	45
6	Nightingale	47
7	Vidant Air 3	80

* Distance determined from common point of interest. Distances have been determined based on the locality's courthouse.

Reviewed: January 2021

Attachment D: State Criteria for Air Medical Transport*

Criteria for Air Medical Transport

The use of Medevac services can assist with trauma patients reaching definitive trauma care in a timely fashion. EMS providers will have to weigh the risks and benefits, including conditions such as transport time and weather conditions. When air medical transport is determined applicable, the MOST appropriate Medevac service [Helicopter EMS (HEMS)] available at the time of the incident should be utilized to transport the trauma patient to the closest appropriate hospital.

Scene transports by helicopter:

- ✓ All patients transported by air must meet the clinical triage criteria for transport the closest appropriate Level I or II trauma center or burn center; *OR*
- ✓ The patient requires a level of care greater than can be expected by the local ground provider.

AND any one (1) of the following:

- ✓ Difficult access situations: Wilderness rescue, Ambulance egress or access impeded at the scene by road conditions, weather or traffic.
- ✓ Time/distance factors
- ✓ ETA to a local hospital by ground greater than ETA to the trauma center by helicopter.

Interhospital transport by helicopter:

- ✓ All trauma patients transported by air should meet the clinical trauma triage criteria for transport to the closest Level I or Level II trauma center or burn center
- ✓ The patient must require a level of care greater than can be provided by the local hospital.
- ✓ The patient requires time critical intervention, out of hospital time needs to be minimal, or distance to definitive care is long.

*Virginia Office of EMS, Medevac Resources Information, A Guide to Air Medical Services in Virginia, March 2011

Attachment E: Air Medical Transport Guidelines for the STEMI & Stroke Patient:

- When presented with a STEMI or Stroke patient, EMS Providers should weigh the risks and benefits of Medevac services in getting definitive, appropriate cardiovascular and/ or neurovascular care *within the time parameters as specified in the ODEMSA Regional Protocols*. Particular consideration must be made for those patients wearing Left Ventricular Assist Devices (LVADs) or similar devices, as well as those patients requiring Hypothermic Interventions, due to Return of Spontaneous Circulation (ROSC).

  - Recognized hospitals specializing in Left Ventricular Assist Devices (LVADs)

    Chippenham Medical Center
    St. Mary's Hospital
    VCU Health Systems

  - Recognized Percutaneous Coronary Intervention (PCI) centers include:

    Chippenham Medical Center
    Henrico Doctors Hospital (Forest)
    Memorial Regional Medical Center
    Southside Regional Medical Center
    St. Francis Medical Center
    St. Mary's Hospital
    VCU Health Systems

- With duration of Stroke symptoms of less than 3.5 hours, scene and transport times should be minimized so the patient may receive the maximum benefit of intravenous thrombolytic therapy (tPA). Onset of symptoms is defined as the last **witnessed** time the patient was symptom free. All hospitals located within the ODEMSA region are Acute Stroke Capable hospitals.

  - Recognized Primary Stroke Centers (PSC) include:

    Chippenham Medical Center *
    Henrico Doctors Hospital (Forest) *
    John Randolph Medical Center
    Johnston Willis Hospital *
    Memorial Regional Medical Center*
    Parham Doctors Hospital
    Retreat Doctors Hospital
    Richmond Community Hospital
    Southside Regional Medical Center
    St. Francis Medical Center
    St. Mary's Hospital *
    VCU *
    VCU Community Memorial Hospital

    ***PCS centers with Neuroendovascular capabilities**

- Providers should remember there is an increased risk of stroke after a myocardial infarction (MI). Positive predictors of stroke after MI include: advanced age; diabetes;

Providers should reference the 2018 ODEMSA Regional Protocol Section 2 Adult Cardiovascular Emergencies and 3.5 Adult General Medical Emergencies – Cerebrovascular Accident (Stroke).

Attachment F: Recommendations for Helipad Operations for Receiving Hospitals

Purpose:

While all hospitals have an obligation to ensure a safe area of operations for medevac aircraft, ODEMSA recognizes that hospitals that receive patients by air should meet a higher standard of safety and operational proficiency. This is due to the changed duties and roles of participants for receiving facilities, the expected increase in traffic, potential for multiple aircraft and the uncertain timing of aircraft arrival.

This document is meant to act as a template for operations, to highlight areas that may not be intuitive to facilities that due not regularly receive patients by air and to guide facilities to available resources.

Scope:

Hospital helipad operations may involve several departments of a facility; including Safety/Security, Risk Management, Emergency Medicine, specific Service Line Administrators, Nursing and Administration. This document will highlight some areas that should be included in helipad operations such as policies and infrastructure discussed in the following headings; risk management, communication, training of responders, emergency response, and policy communication and infrastructure.

Infrastructure:

Hospitals intending to receive patients by air should have a designated, secure landing area, located away from existing towers/obstructions. The landing area should be a hard surface with no steps. This facilitates use of a wheeled stretcher for the safety of the patient, flight crew and receiving team. Ideally, no section of the designated path should require the patient to be carried, as this requires a large number of resources and increases potential risk.

The landing area should be marked in such a way that it is clearly visible from the air, day or night. This can be done with painting of a red “H” for day operations and use of marking lights for night operations. Lights should be ground level if possible, so as not to be an obstruction, and able to withstand the high winds of the rotor wash on takeoff and landing. Helipad lighting should not be pointed directly at aircraft or anticipated approach path where it could be a distraction to the pilot.

Landing areas should be enclosed with a barrier to prevent pedestrian or vehicle traffic from entering during helipad operations. This significantly reduces the manpower needed to secure the area as reduction of entry points reduces the amount of resources needed to insure security. Low fences are adequate for providing security. Concrete barriers add the benefit of controlling the wind and preventing damage to property and injury to persons.

Training:

Landing area responders should have initial and ongoing training regarding operations. This training should include hazard awareness, fire suppression, aircraft safety and communication.

Recommendations for Helipad Operations for Receiving Hospitals (continued)

Local medevac resources should be consulted regarding training. In addition, the National EMS Pilots Association (NEMSPA) has resources available including a free training video at www.nemspa.org.

Military Aircraft:

The limitations of the landing area should be known and military aircraft should be taken into account. If the area is not sufficient to accommodate the larger military aircraft, a secondary landing area should be identified for their use. In the event of a major disaster, the potential for military aircraft to be involved in operations cannot be overlooked.

Disclaimer:

The information contained in this document is intended to be used as a guideline only. Local laws and regulations take precedence.

Additional Resources:

FAA Advisory Circular AC 150/5390-2 Heliport Design
The 2011 NFPA 418: Standard for Heliports