

## Section 4.7

### Emergency Medical Assistance

The Coast Guard is routinely involved in requests for emergency medical assistance, both traditional maritime response and non-maritime emergency medical service incidents. **Medical advice transmitted by Coast Guard facilities must come from qualified medical officers.** Also, replies to requests for medical advice should be done on a not-to-interfere basis with commercial providers. Two policy sections address how emergency medical assistance will be provided and the criteria for action under various medical situations for maritime and non-maritime medical response.

Areas, Districts and Sectors are to have procedures in place for responding to a request for **medical advice at sea (MEDICO)** or for **medical evacuation (MEDEVAC).**

MEDICOs and MEDEVACs are part of the traditional Coast Guard SAR mission. Some shipping companies and vessel owners, however, have contractual arrangements with hospitals or commercial medical advisory companies to provide medical advice.

Often calls for emergency medical assistance cannot be immediately classified as a MEDICO or MEDEVAC. Knowledgeable operational medical advice is required to make this determination. The possibility of a MEDICO developing into a MEDEVAC is always present.

#### 4.7.1 MEDICO

**4.7.1.1** MEDICO, discussed in References (a) and (b), is an international term normally meaning the passing of medical information by radio. Medical advice is available through many sources that include Coast Guard and DOD medical providers, medical firms and hospitals contracted by shipping companies and international service organizations such as the International Radio-Medical Center (CIRM).

**4.7.1.2** *The Coast Guard shall cooperate to the extent possible to identify appropriate medical resources to relay medical assistance messages or assist in establishing communication between the vessel and their contracted services if commercial channels of communication are not available.*

#### 4.7.2 MEDEVAC

**4.7.2.1** MEDEVAC can be extremely hazardous to both patient and crew because of severe environmental conditions frequently encountered at sea, and from dangers inherent in transferring a patient from vessel to vessel or from vessel to helicopter.

**4.7.2.2** When deciding whether a case is sufficiently urgent to justify the risks involved with a MEDEVAC, **the SMC should obtain advice from medical personnel, preferably Coast Guard or Department of Defense medical personnel,** familiar with:

- (a) SAR operations.
- (b) Emergency medical capabilities of Coast Guard crews.
- (c) Operating characteristics of Coast Guard SRUs.

**4.7.2.3** ***In all MEDEVAC operations, the risks of the mission must be weighed against the risks to the patient and the responding resource.*** Factors to consider include:

- (a) The patient's clinical status.
- (b) The patient's probable clinical course if MEDEVAC is delayed or not performed. A delayed MEDEVAC which does not have a negative impact on the patient's probable clinical course may:
  - (1) Provide for adequate planning;
  - (2) Allow the rescue unit to stay within its range limits;
  - (3) Enable a daylight evacuation;
  - (4) Allow the vessel to enter port; or
  - (5) Allow for the weather to moderate.
- (c) Medical capabilities of responding Coast Guard personnel and equipment. Some Coast Guard operating units have Emergency Medical Technicians (EMTs); a few units have a Health Services Technician attached. Helicopter rescue swimmers are all EMT trained. All qualified boat crews have taken basic first aid training.
- (d) Prevailing weather, sea, and other environmental conditions.
- (e) Contractual arrangements between vessels and hospitals or commercial medical advisory services.

**4.7.2.4** The final decision to conduct a MEDEVAC rests with the aircraft commander, cutter commanding officer, or coxswain on scene.

**4.7.2.5** Guidance for filling out the required MEDEVAC Report is provided in Chapter 1 of this Addendum.

### **4.7.3 District Procedures**

**4.7.3.1** To help ensure timely response for MEDEVACs and prompt relay of MEDICO advice through Coast Guard channels of communication, each District should maintain a list of:

- (a) Medical personnel available and qualified to recommend MEDEVACs and advise on MEDICOs. The medical personnel should be knowledgeable in Coast Guard helicopter and vessel SAR operations and in the capabilities of Coast Guard crews, helicopter rescue swimmers, Emergency Medical Technicians (EMTs), and Health Services Technicians (HSs).
- (b) Primary sources of emergency medical advice include:
  - (1) Coast Guard or Department of Defense flight surgeons.
  - (2) Coast Guard or Department of Defense aviation medical officers.
  - (3) Coast Guard or Department of Defense general medical officers.
  - (4) Civilian physicians.

**4.7.3.2** District Commanders should, if possible, indoctrinate personnel likely to make operational medical recommendations. The indoctrination may include aircraft familiarization, helicopter hoisting, and aircraft and boat operations.

#### 4.7.4 Medical Resources

The primary sources of emergency medical advice should be contacted by telephone or the most rapid means available, as soon as possible after a call for emergency medical assistance is received. If none of these sources are immediately available within the District, similar resources in other Districts may be contacted. If contacting a qualified medical advisor is unavoidably delayed, the SMC may take action prior to receiving medical advice, but should continue to seek medical recommendations.

#### 4.7.5 MEDEVAC Procedures for Merchant Vessels

The United States has developed a recommended checklist for merchant vessels to use in medical emergency cases. Most of the information parallels that found on the MEDEVAC/MEDICO Checklist in Appendix G. The information requested to be on the merchant vessel checklist should be incorporated in procedures for MEDEVAC.

##### 4.7.5.1 Recommended checklist content for use by vessels and the controllers is as follows:

“When requesting medical assistance for an ill or injured person, additional relative information as indicated below should be furnished. Other information may also be necessary in certain cases. Codes from Chapter 3 of the International Code of Signals may be used if necessary to help overcome language barriers. *If medical evacuations are being considered, the benefits of an evacuation must be weighed against the inherent dangers of such operations to both the person needing assistance and to rescue personnel.*”

- (a) Patient's name, age, gender and nationality;
- (b) Patient's respiration, pulse rate, temperature and blood pressure;
- (c) Location of pain;
- (d) Nature of illness or injury, including apparent cause and related history;
- (e) Symptoms;
- (f) Type, time and amounts of medications given;
- (g) Time of last food consumption;
- (h) Ability of patient to eat, drink, walk or be moved;
- (i) Whether the vessel has a medical chest, and whether a physician or other medically trained person is aboard;
- (j) Whether a suitable clear area is available for helicopter hoist operations or landing;
- (k) Name, address and phone number of vessel's agent;
- (l) Last port of call, next port of call, and ETA of next port of call; and
- (m) Additional pertinent remarks.”

##### 4.7.5.2 Action upon receipt of a request for emergency medical assistance, either MEDICO or MEDEVAC, in general, is to:

- (a) Contact qualified medical resources to obtain operational medical advice.
- (b) Alert SAR forces when a MEDEVAC is likely.
- (c) If an immediate MEDEVAC is not required, determine whether the vessel has a contractual arrangement with a commercial medical advisory service or hospital, and assist them as practicable.

SAR Coordinators may delegate this responsibility.

#### **4.7.6 Transport of Next of Kin (NOK) with MEDEVAC Patients**

Transporting NOK decisions are made by the SMC. These decisions should be made in consultation with the cutter commanding officers, boat coxswains and aircraft commanders directed to respond to the incident. The following paragraphs provide guidance for transport decisions for the possible situations that may arise. Final decisions to transport NOK for safety of operations are made by cutter commanding officers, boat coxswains and aircraft commanders. Normally, in those situations where the decision is made to transport NOK with a patient, only one person would be permitted.

**4.7.6.1 Hoisting of NOK.** Due to the inherent dangers of hoisting, NOK will not normally be hoisted along with MEDEVAC patients except in cases where the patient is a minor child. For minor children one parent (or legal guardian) may accompany the child. Other situations, which may call for hoisting NOK, are:

- (a) Patient being hoisted is the only parent present of a minor child (NOK);
- (b) Hoisting of patient(s) from a vessel would leave the vessel and remaining person(s) in danger due to inability to safely operate the vessel in conjunction with current weather, location, delay in other help arriving; or
- (c) There is severe emotional trauma to either the patient or NOK and on recommendation of the flight surgeon or other MEDEVAC advice source, it would be medically beneficial for the NOK to accompany the patient.

**4.7.6.2 Transporting NOK by aircraft not involving hoisting.** In MEDEVAC situations where a patient is to be transported by aircraft but hoisting is not involved, NOK to accompany the patient may be allowed after evaluation of the risks and capabilities of the on scene resource.

**4.7.6.3 Transporting NOK by surface craft.** In MEDEVAC situations where a patient is to be taken off a vessel or other location by cutter or boat, the risks involved are generally lower than those with hoisting. Transporting the NOK by surface craft may be permitted after evaluation of risks and capabilities of the on scene resource. *The SMC must consider the following in evaluating the risk involved when making a decision to transport NOK by surface craft:*

- (a) Dangers in transferring between vessels given relative sizes of vessels;
- (b) Current on scene conditions (seas, winds, weather, daylight/dark); and
- (c) Physical ability of the NOK to negotiate the move across to the Coast Guard vessel.

#### 4.7.7 Protocols When Encountering Infectious Diseases.

Commandant (CG-112) is responsible for establishing appropriate protocols for medical response and protection of Coast Guard rescue personnel from infectious diseases they may encounter in the performance of their duties. Protocols may be found via their web site: <http://www.uscg.mil/hq/cg1/cg112/cg1121/default.asp>.

##### 4.7.7.1 Blood-borne Pathogens

- (a) Blood-borne pathogens are microorganisms that are passed via exposure to human blood or other infectious materials that could result in disease or death. Hepatitis B virus and Human Immunodeficiency Syndrome Virus (HIV) are most commonly associated with blood-borne pathogen diseases. Other infectious materials could include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids, as well as any unfixed tissue or organs other than intact skin from a human (living or dead). *Personnel shall take precautions whenever the potential of exposure to blood-borne pathogens exists. To reduce possible exposure, properly fitting latex or vinyl gloves shall be worn whenever the hands of personnel may come in to contact with blood or other potential infectious material. Eye protection, facemasks, or face shields shall be worn whenever splashes, spray, spatter or droplets of blood could contaminate the mouth, nose, or eyes. The use of pocket masks and resuscitation bags shall be used when emergency mouth-to-mouth resuscitation is performed.*
- (b) *Personnel shall refer to Reference (aa) for further guidance to minimize the inadvertent exposure and disposal of contaminated materials due to blood-borne pathogens.* This instruction provides detailed instructions on the use of protective equipment and proper disposal and clean up of contaminated materials

**4.7.7.2 Respiratory Diseases** such as the Severe Acute Respiratory Syndrome (SARS) and various strains of influenza are serious health concerns for rescue personnel and may be encountered in the course of rescue as well as other Coast Guard missions requiring interaction with vessel crews and passengers. Appropriate safeguards should be put in place to protect rescue personnel from possible infection. Protocols and updates may be found via the Commandant (CG-112) web site.

##### 4.7.8 Cardiopulmonary Resuscitation

During SAR missions or MEDEVACs, Coast Guard SAR responders often recover victims of injury or medical emergencies who are in cardiopulmonary arrest (not breathing and do not have a pulse). The Coast Guard has an established cardiopulmonary resuscitation protocol to address these situations. This protocol may be found in appendix D of this addendum and at: <http://www.uscg.mil/hq/cg1/cg112/cg1121/default.asp>. All persons who may be designated as SMC and EMS responders should become familiar with this protocol.

**4.7.8.1 Withholding CPR.** Recent medical research on emergency cardiac resuscitation has resulted in new recommendations on “Do Not Start CPR” and “Stop CPR” guidelines. The Coast Guard protocol addresses these aspects of response to cardiopulmonary arrest incidents. The

protocol is posted at <http://www.uscg.mil/hq/cg1/cg112/cg1121/default.asp>, the Office of Operational Medicine's web site and provided in Appendix D for quick reference.

**4.7.8.2 Stopping CPR to conduct a hoist or transferring a patient.** Stopping CPR may turn sometimes a near futile effort into a virtually certain futile effort to save a life. Accordingly, the decision to stop CPR for a hoist is made by the flight surgeon, if available. If the flight surgeon is not available, the CPR protocol should be consulted and followed assuming the start time for CPR is on completion of the hoist. A multitude of factors impact this decision, among them:

- (a) Time elapsed since the patient went into cardiopulmonary arrest,
- (b) Proximity to advanced medical care,
- (c) Expected duration of hoist (patient and rescue personnel if sufficient personnel are not available on board the helicopter to continue CPR without on deck rescue personnel),
- (d) On scene conditions and risk in conducting the hoist in regards to medical condition, and
- (e) Other medical factors (injuries, chronic illness, etc.).