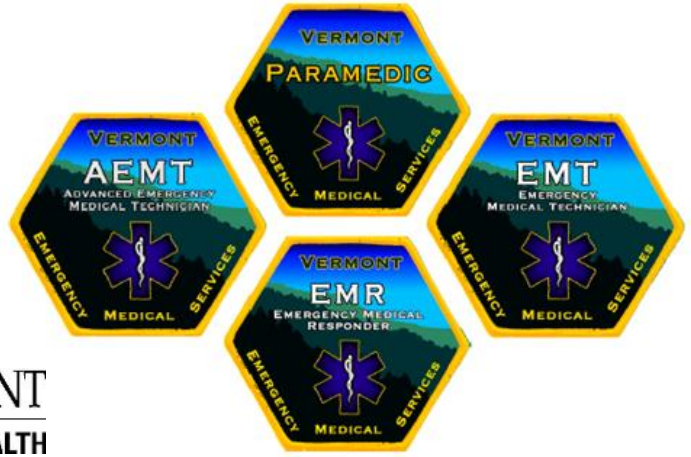
Vermont **EMS**

Quick Reference Guide

for Hospital Staff

Version 1

2014



Vermont EMS for Children

Provided by:

VERMONT DEPARTMENT OF HEALTH

EMT (Basic)

Medications

Assists with self-administration of patient's medications:

- Diazepam rectal gel
- Epinephrine by auto-injector
- Metered dose inhalers (Albuterol, Levalbuterol or combination of Alberterol/Ipratropium Bromide)
- Nitroglycerin - sublingual

May administer:

- ♦ Aspirin - oral
- Glucose - oral
- Naloxone (Narcan) - intranasal
- Nerve antidote kits (Atropine, Pralidoxime or Duodote)

■Adult and child
♦Adult only

Skills

Airway Procedures

- Automated transport ventilator
- Bag mask ventilation
- Naso/Oropharyngeal airway
- Oral suctioning
- Oxygen administration via nasal cannula and mask
- Pulse oximetry
- Tracheostomy ventilation and maintenance

Vascular Access

- Blood glucose analysis

Cardiac Management

- Application of 12-lead ECG
- Automatic external defibrillator (AED)
- CPR
- Induced mild hypothermia - surface cooling (ice packs)

Immobilization

- Advanced spinal assessment
- Cervical and spinal immobilization
- Stabilize and immobilize fractures - including traction splinting

Other Skills

- Body temperature assessment
- Emergency childbirth
- Physical Restraints
- Stroke scale assessment
- Tourniquet
- Vital signs
- Wound management / burn care

■Adult and child

EMT (BASIC)

Advanced EMT (Intermediate)

Medications

Can provide all medications that an EMT (Basic) can provide plus:

- ♦ Albuterol - inhalation
- ■ Dextrose - intravenous or intraosseous
- ♦ Crystalloid infusion - intravenous or intraosseous
- ♦ Epinephrine 1:1,000 - intramuscular
- ♦ Epinephrine 1:10,000 (Cardiac arrest only) - intravenous or intraosseous
- ■ Glucagon - intramuscular
- ♦ Ipratropium bromide (Atrovent) - inhalation
- ♦ Naloxone (Narcan) - intravenous, intraosseous, intramuscular, intranasal or subcutaneous
- ♦ Nitroglycerin (Tridil, Nitrobid, Nitrostat) - sublingual
- ♦ Nitrous oxide premixed with oxygen (Nitronox) - inhalation

■Adult and child
♦Adult only

Skills

Can provide all skills that an EMT-Basic can provide plus:

Airway Procedures

- ■ Capnography - quantitative waveform
- ♦ Combitube
- ♦ CPAP
- ■ Endotracheal suctioning
- ● King LT
- ● Laryngeal mask airway
- ♦ Nebulizer treatment

Vascular Access

- ♦ Blood draw
- ■ Commercial intraosseous needle
- ■ Peripheral venous access - extremities

Cardiac Management

- ♦ 12-Lead Application
- ♦ AED

■Adult and child
♦Adult only
●Adult and pediatric cardiac arrest

ADVANCED EMT (INTERMEDIATE)

Paramedic

Medications

Can provide all medications that an EMT (Basic) and Advanced EMT (Intermediate) can provide plus:

- ■ Acetaminophen (CCP only)
- ■ Adenosine (Adenocard)
- ■ Amiodarone (Cordarone)
- ■ Atropine
- ■ Calcium Chloride
- ■ Colloid solutions
- ■ Diazepam (Valium)
- ♦ Diltiazem (Cardizem, Dilacor, Tiazac)
- ■ Diphenhydramine (Benadryl)
- ■ Dopamine
- ■ Epinephrine
- ∇ Etomidate (Amidate)
- ■ Fentanyl (Sublimaze)
- ♦ Haloperidol (Haldol)
- ♦ Heparin (CCP only)
- ■ Ibuprofen (CCP only)
- ∇ Ketamine
- ■ Levalbuterol (Xopenex)
- ■ Lidocaine
- ■ Lorazepam (Ativan)
- ■ Magnesium sulfate
- ♦ Methylprednisolone (Solumedrol)
- ♦ Metoclopramide (Reglan)
- ♦ Metoprolol (Lopressor)
- ■ Midazolam (Versed)
- ■ Morphine
- ■ Norepinephrine (Levophed)
- ■ Ondansetron (Zofran)
- ♦ Oxytocin (Pitocin)
- ♦ Phenylephrine (Neo-Synephrine)
- ■ Pralidoxime (2-Pam, Protopam Chloride)
- ♦ Prochlorperazine (Compazine)
- ■ Proparacaine (Alcaine)
- ∇ Rocuronium (Zemuron)
- ■ Sodium bicarbonate
- ∇ Succinylcholine (Anectine)
- ■ Tetracaine
- ♦ Vasopressin
- ∇ Vecuronium (Norcuron)

Medication Administration Routes:

- ■ Endotracheal
- ■ Intraosseous
- ■ Intranasal
- ■ Inhalation
- ■ Intravenous pump
- ■ Rectal

■Adult and child
♦Adult only
∇Additional training req'd

Skills

Can provide all skills that an EMT (Basic) and Advanced EMT (Intermediate) can provide plus:

Airway Procedures

- ♦ Capnography - qualitative waveform
- ■ Chest tube maintenance
- ■ Endotracheal intubation
- ■ Foreign body removal (Magill Forceps)
- ■ Gum elastic bougie
- ■ Nasotracheal intubation
- ■ Naso/Orogastric tube
- ■ Needle decompression
- ■ Percutaneous crichothyrotomy
- ∇ Rapid sequence intubation
- ■ Tracheal tube replacement through stomas
- ■ Tracheostomy maintenance

Vascular Access

- ■ Central line access
- ■ Peripheral venous access - external jugular

Cardiac Management

- ■ Induced mild hypothermia - cold saline
- ■ Interpretation of 3- or 4-lead ECG
- ■ Interpretation of 12-lead ECG
- ■ Manual defibrillation
- ■ Synchronized cardioversion
- ■ Transcutaneous pacing

Other Skills

- ■ Morgan lens
- ■ Restraint - pharmacological

■Adult and child
♦Adult only
∇Additional training required

PARAMEDIC

Paramedic: Interfacility Transfers

TRANSFERRING INSTITUTION

Responsibility for patient transfer lies with the transferring physician/provider, and must take into account the risks versus the benefits to the patient. Providing appropriate equipment, medications, and qualified staffing during transport is paramount to patient safety. These parameters should be based on the requirements of the patient at the time of transfer, and in reasonable anticipation of foreseeable complications, deterioration, and medical needs that might arise during transport.

Initiation of a transfer should be a carefully coordinated effort by the transferring and receiving physicians, the transferring and receiving facilities, and the transferring unit and personnel. Time or advanced notification may be needed for the transferring EMS unit to reconfigure in order to meet the needs outlined here.

STAFFING LEVELS — PARAMEDIC AND CCP INTERIM GUIDANCE

Both the scope and curriculum for this endorsement are currently undergoing review for revision based on the new Paramedic scope of practice and the evolution of interfacility transfer medicine in VT. New guidance is expected early in 2014 with subsequent updates to this protocol.

Under the National Scope of Practice Model as adopted by VT, the Paramedic scope/curriculum does not specifically address the care of the critically ill patient during an extended transport between facilities. VT EMS therefore requires specific additional training for Paramedics to provide extended transport of critically ill or injured patients if their clinical needs exceed those otherwise covered by the VT Statewide EMS protocols.

Vermont EMS currently has an “endorsement” for EMT-Paramedics related to interfacility training and credentialing known as *Critical Care Paramedic* (CCP). This level of training was intended to address the majority of interfacility transfer situations and was originally configured for the older EMT-Paramedic level. However, the new Paramedic scope (fully achieved via transition from EMT-P and contingent upon completion of protocol education) does allow for the use of pressure infusion pumps and administration of IV nitroglycerine and electrolytes, by all Paramedics. These specific items were previously restricted to only those providers with the VT CCP endorsement.

STAFFING LEVELS — ALL NON-PARAMEDIC CONFIGURATIONS

Some patients will have a level of acuity and/or complexity that requires a more advanced configuration/level of interfacility transport—either by air or ground. The operation of such transfer resource programs requires greater training, medical oversight, and service support, and is intended for the more limited number of acute and complex interfacility transfers that occur. If that level of resource is not readily available, it is an acceptable practice to supplement the EMS crew with hospital staff that is qualified to provide the level of care the patient requires. EMS providers must therefore refuse to transport patients that have a level of acuity and/or medication regimen that they are not comfortable with, and work with the sending facility to acquire optimal staffing (such as sending nursing staff or other provider).

(continued)

Interfacility Transfers and Minimum Staffing Requirements

Minimum Universal BLS staffing configuration (EMS rule 2.1.2)

1 EMT (Basic) and 1 licensed EMS provider (driver)

Scope examples:

- No IV infusions. No cardiac ECG monitoring.
- Oxygen for stable patient permitted
- Previously inserted Foley catheter, suprapubic tube, feeding tube (NG, PEG, J-tube not connected to infusion or suction)

Minimum AEMT staffing configuration

1 AEMT (Intermediate) and 1 licensed EMS provider (driver)

Scope examples:

- No cardiac ECG monitoring.
- No ongoing meds administered or anticipated
- Peripheral intravenous administration of any crystalloid infusion.
- Patient-controlled analgesic (PCA) pump.

The transferring physician/provider is responsible for determining the level of EMS provider and resources that are appropriate to meet the patient's current and anticipated condition and needs. In the interfacility transfer environment, all patient care delivered must be within the scope of the provider's protocols and licensure. (EMS providers may need to educate sending/receiving facility staff about their respective scopes of practice and any limitations contained therein.)

Pediatric patients require passenger safety restraints appropriate to the child's size and medical condition.

A neonatal or pediatric patient may require expertise and equipment provided by a dedicated pediatric transport service.

MEDICAL CONTROL RESPONSIBILITIES

According to EMTALA, patient care during transport until arrival at the receiving facility is the responsibility of the transferring physician unless other arrangements are made.

Sometimes, as in certain Air Medical Transport services or ground critical care units, the transport unit is functioning as an extension of a tertiary care center. It operates under that facility's protocols, medical directorship, and on-line control.

In the prehospital environment, the EMS system operates under statewide protocols. In the interfacility transfer environment, written transfer orders that are within the scope of the provider's protocols and licensure are also required to be authored by the transferring physician. The combination of protocols and transfer orders provide off-line medical control.

Transfer orders must be specific, appropriate to the patient being transferred, and reasonably anticipate potential complications en route. Transfer orders may reference the use of VT EMS protocols where they are applicable. If patients develop new signs and/or symptoms during transport, beyond their initial transfer diagnosis, providers may treat the new signs and/or symptoms according to VT EMS protocols. In rare circumstances where transfer orders and VT EMS protocols are in conflict, transfer orders take precedence assuming they are within the scope of the provider's level of licensure.

The transferring physician should be immediately available to review transport orders and provide medical control communication via radio, cell phone, or telephone during the transport. If the physician is unavailable, they must make other arrangements for review of the transfer orders with the transport crew.

VERMONT DEPARTMENT OF HEALTH
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