### **New Hampshire**

# EMS Quick

Reference Guide

for Hospital Staff

Version 2 2013

#### Provided by:



New Hampshire Department of Safety Div. of Fire Standards and Training & EMS



NH EMS for Children Program at Dartmouth

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# EMT (Basic)

#### Medications

# Assists with self-administration of patient's medications:

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

#### May administer:

- Activated Charcoal oral
- ♦ Aspirin oral
- Glucose oral
- Nerve antidote kits (Atropine, Pralidoximine, or Duodote)

■Adult and child

**♦**Adult only

#### - Skills

#### **Airway Procedures**

- Bag valve mask ventilation
- Nasopharyngeal airway
- Oral suctioning
- Oropharyngeal airway
- Oxygen administration via nasal cannula and mask
- Pulse oximetry
- Quantitative waveform capnography
- **♦** Supraglottic airway
- Tracheostomy ventilation and maintenance

#### Vascular Access

Blood glucose analysis

#### **Cardiac Management**

- Application of 3- or 4-Lead ECG
- Application of 12-Lead ECG
- Automatic External Defibrillator (AED)
- CPR

#### **Immobilization**

- Advanced spinal assessment
- Cervical and spinal immobilization
- Stabilize and immobilize fractures

#### Other Skills

- Body temperature assessment
- Emergency childbirth
- Physical Restraints
- Stroke scale assessment
- Vagal nerve stimulator activation
- Vital signs
- Wound management / burn care

■Adult and child ◆Adult cardiac arrest only



# Advanced EMT (Intermediate)

#### Medications

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

- ♦ Albuterol
- Dextrose
- Crystalloid infusion
- ♦ Epinephrine
- Glucagon
- Hydrocortisone (Solu-Cortef)
- ♦ Hydroxocobalamin (Cyanokit)
- ◆ Ipratropium bromide (Atrovent)
- ♦ Lidocaine (IO anesthetic only)
- ♦ Naloxone (Narcan)
- Nitroglycerin (Tridil, Nitrobid, Nitrostat)
- Nitrous oxide premixed with oxygen (Nitronox)

# Medication Administration Routes:

- **♦** Inhalation
- ♦ Intramuscular
- Intraosseous needle (pediatric shock and burns: AEMT only)
- Intravenous (pediatric shock and burns: AEMT only)
- ▲ Intravenous pump
- **♦** Intranasal
- ♦ Subcutaneous
- Sublingual

■Adult and child

**♦**Adult only

**▲ During interfacility adult transfers only** 

#### Skills

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

#### **Airway Procedures**

- ◆ CPAP
- Endotracheal suctioning
- King LT
- Laryngeal mask airway
- ♦ Nebulizer treatment

#### Vascular Access

- ♦ Blood draw
- Commercial intraosseous needle (pediatric shock and burns: AEMT only)
- Peripheral venous access extremities (Pediatric shock and burns: AEMT only)

#### **Cardiac Management**

- ◆ Interpretation of 3- or 4-lead ECG (V-Fib/V-Tach, Asystole, PEA)
- ♦ Manual defibrillation

- ■Adult and child
- **♦**Adult only
- Adult and pediatric cardiac arrest

# **Paramedic**

#### Medications

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

- Acetaminophen (Tylenol)
- Adenosine (Adenocard)
- Amiodarone (Cordarone)
- Atropine
- Calcium Chloride
- Diazepam (Valium)
- Diltiazem (Cardizem, Dilacor, Tiazac)
- Diphenhydramine (Benadryl)
- ♦ Dolasetron (Anzemet)
- Dopamine
- ∇ Etomidate (Amidate)
- Fentanyl (Sublimaze)
- Flumazenil (Romazicon)
- Granisetron (Kytril)
- ♦ Haloperidol (Haldol)
- ♦ Heparin

- Ibuprofen (Motrin)
- ♦ Ketorolac (Toradol)
- $\nabla$  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
- $\nabla$  Succinylcholine (Anectine)
- Tetracaine
- ♦ Vasopressin
- ∇ Vecuronium (Norcuron)

# Medication Administration Routes:

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

■Adult and child ♦Adult only ∇Additional training requir

∇Additional training required; Skill may vary by EMS agency





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

#### **Airway Procedures**

- Chest tube maintenance
- Endotracheal intubation
- Foreign body removal (Magill Forceps)
- Laryngeal mask airway
- Nasotracheal intubation
- Nasogastric tube
- Nebulizer Treatment
- Needle decompression
- $\nabla$  Rapid sequence intubation
- Supraglottic airway
- Tracheal tube replacement through stomas
- Ventilator

#### **Vascular Access**

- Blood draw
- $\nabla$  Central line access
- Peripheral venous access external jugular

#### **Cardiac Management**

- Interpretation of 3- or 4-lead ECG
- Interpretation of 12-lead ECG
- Synchronized cardioversion
- Transcutaneous pacing

#### Other Skills

- Eye irrigation
- $\nabla$  Immunization
- $\nabla$  Induced hypothermia
- Restraint pharmacological

■Adult and child

**♦**Adult only

VAdditional training required; Skill may vary by EMS agency

# Paramedic: Inter-facility Transfers

### Paramedic for Inter-facility Transfers (PIFT) Paramedic for Critical Care Transport (CCT)

PIFT Paramedics and CCT Paramedics have skills and may provide medications over and above all other levels of providers, particularly during inter-facility transport of critically injured and ill persons. Any medication or blood product ordered and initiated in a health care facility or home health care setting may be continued during transport staffed by a PIFT or CCT Paramedic. Advanced skills of PIFT Paramedics and CCT Paramedics are listed in Transfer Patient Acuity Levels and Minimum Staffing Requirements.

All paramedics staffing the transfer of a critically ill patient must be credentialed at a minimum of PIFT level. A small number of patients will have a level of acuity and/or complexity requiring the higher CCT level. If a credentialed CCT Crew is not available, it is acceptable to supplement the PIFT crew with hospital staff qualified to provide the level of care required by the patient. These include critical care or emergency registered nurse, physician assistant, nurse practitioner, physician, or a CCT Paramedic. Two advanced care providers must be in the patient compartment during transport.

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.

In cases where CCT Paramedics are unavailable AND delay in transfer would have a significant impact on patient

outcome, other transport arrangements may be initiated as a measure of last resort provided that:

- Sending facility makes an exhaustive effort to send additional personnel,
- NH EMS Bureau and Unit EMS Medical Director are notified within 48 hours and appropriate TEMSIS and IFT documentation are completed by the EMS Unit and sending physician/institution,
- All interventions are within scope of practice of the transporting paramedic and vehicle and
- EMS providers must 1) refuse to transport patients who have an acuity level and/or medication regimen with which the providers are uncomfortable and 2) work with the sending facility to acquire optimal staffing.

#### Transfer Patient Acuity Levels and Minimum Staffing Requirements

## Stable patient with virtually **NO** risk of deterioration

1 EMT-Basic and 1 First Responder (driver)

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

## Stable patient with <u>LOW</u> risk of deterioration

1 EMT-Intermediate and 1 First Responder (driver)

- IV crystalloids
- No ongoing meds administered or anticipated
- PCA pump
- IV pump for non-pharmacological agents
- Established feeding tube

## Stable patient with <u>MEDIUM</u> risk of deterioration

1 PIFT Paramedic and 1 EMT (driver)

- Transcutaneous pacing
- Bipap
- Stable long-term ventilated patient to or from a medical facility, long term care facility, and/or home
- Intubated/ventilated patients on Assist Control or SIMV with non-complex settings \*
  - $*\underline{MUST}$  have a second provider in the patient compartment

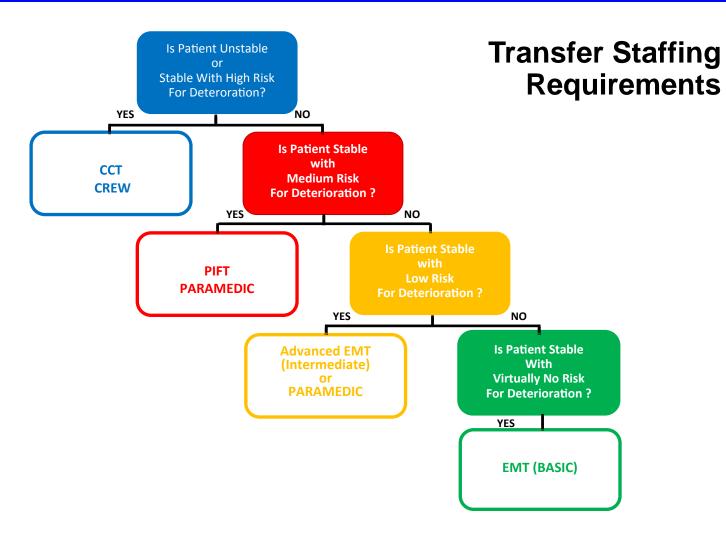
- Medical monitoring, procedures, and medication administration consistent with skill set, approved medications, protocols, and licensure
- Advanced airway management
- Chest tube
- Infusion of previously initiated blood products
- Maintenance of previously initiated medications
- Epidural catheter if secured, capped and labeled

## UNSTABLE patient or stable with <u>HIGH</u> risk of deterioration

CCT Crew or 1 PIFT Paramedic, 1 advanced care provider (hospital-based) and 1 EMT (driver)

- Multiple vasoactive medication drips
- Uncorrected shock
- Invasive monitoring
- Balloon pump
- Transvenous pacing
- Intubated/ventilated patients with advanced or complex vent settings (such as pressure support PEEP >10, etc.) ◆
- Procedures consistent with provider licensure, scope of practice, and training

<sup>\*</sup>Non CCT Crews <u>MUST ALSO</u> have respiratory care practitioner in patient compartment. This is in addition to PIFT Paramedic and hospital-based advanced health care provider.



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