

Definitions

ACLS is Advanced Cardiac Life Support.

Advanced Airway means the skill of endotracheal intubation and use of other airway modalities such as Blind Insertion Airway Devices (BIAD) performed only by those who have completed practical training in each of these skills.

AEMT (Advanced EMT) means the ability to provide Advanced EMT level of care (previously called Intermediate EMT).

AHA is the American Heart Association

ALS (Advanced Life Support) means the ability to provide advanced level of medical care, which in the prehospital realm means *Paramedic*. The ALS skills may include the following: IV access, advanced airway, cardiac monitoring, and/or oral or parenteral medications.

ALS (Advanced Life Support), If Available means that the patient shall receive the highest appropriate ALS intervention as soon as possible. The decision in this realm as to which interventions may be appropriate rests with the Paramedic. If any skills other than basic life support are deemed necessary or initially implemented, an ALS response should be sought, with simultaneous dispatch if possible. The use of a medical priority dispatching program, approved by the State Medical Director, is encouraged. When this cannot happen, the crew in attendance should bring ALS care and the patient together in the fastest of three ways: (1) ALS back-up at the scene; (2) ALS back-up met en route; or (3) ALS by hospital staff in the emergency department if prehospital rendezvous is not possible.

The BLS providers on the scene may modify the ALS response as appropriate.

AMS refers to Altered Mental Status and **AMSS** refers to Altered Mental Status Scale/Score.

BIADs refers to Blind Insertion Airway Devices and include periglottic (ie: LMA) and trans glottic (ie: King) devices.

BP in these protocols refers to the systolic blood pressure.

BSA refers to Body Surface Area and, in burn patients, can be estimated by using the Rule of 9s or patient's hand size.

BVM refers to Bag-Valve-Mask ventilation

CHF refers to Congestive Heart Failure, a condition in which patients may present with dyspnea, hypoxia, wheezing, and rales.

CNS refers to Central Nervous System and includes the brain and spinal cord

Continuous Nebulization is administration of 3 unit doses of albuterol or albuterol-ipratropium without interruption; that is, put all 3 unit doses into the nebulizer at the same time (if volume allows) and administer until complete OR administer 1 unit dose x 3 without waiting between administrations.

Definitions

CPAP refers to Continuous Positive Airway Pressure

CVA refers to Cerebral Vascular Accident (stroke)

DNR refers to Do Not Resuscitate

DNI refers to Do Not Intubate

Emergency Department means a hospital that provides an organized Emergency Service or Department that is available twenty-four (24) hours a day, seven (7) days a week and has the capability to provide On-Line Medical Control, to evaluate, treat, stabilize, and refer to an appropriate outside resource for all persons who present themselves for treatment.

Emergency Medical Responder

The MDPB recognizes the Emergency Medical Responder (EMR) scope of practice to include the following:

- Airway management, including manual maneuvers, suctioning, application of supplemental O₂, and use of the following airway adjuncts - pocket mask, OPA/NPA, BVM
- Acquisition of manual vital signs
- Application of medications for force protection only (such as the Mark 1 kit)
- Performance of manual CPR and use of AED
- Assistance in childbirth
- Manual stabilization of the cervical spine or extremity injuries
- Hemorrhage control, including use of a tourniquet
- Emergency patient moves (such as drags, carries, etc.)
- Provision of naloxone for suspected overdose

The Maine EMS EMR may practice within this scope of practice to include these skills.

EMS Provider means any person or service licensed by Maine EMS to provide emergency medical services.

End-tidal CO₂ (ETCO₂) is a measurement of carbon dioxide in exhaled air used to assess ventilation, also referred to as capnography. The capnography monitoring must be *continuous* and with a device that displays a waveform.

ETT refers to Endo-Tracheal Tube

Fluid Bolus indicates maximum fluid administration achievable without pumps or other special equipment in the field setting. Specifically, running a large bore IV wide open until the desired clinical condition or blood pressure, based on the patient's underlying condition, is achieved. A true IO bolus, at the appropriate dose with a syringe/3-way stop-cock assembly or pressure bag, is acceptable. Pediatric boluses are 20 mL/kg, and may be repeated one time if patient remains hypotensive, unless a specific alteration is noted in the protocols. Unless a specific volume of fluid is specified in the specific protocol, if the patient requires more than 40 mL/kg of IV fluid, contact OLMC to further guide fluid administration.

GI refers to Gastro-Intestinal tract

GU refers to Genito-Urinary tract

Hypoglycemia is a blood glucose less than 60 mg/dL.

Definitions

IM refers to Intra-Muscular route of medication administration

IN refers to Intra-Nasal route of medication administration

IO in these protocols, means intraosseous access. IO may be used by the Advanced EMT or Paramedic. The IO route should be considered in any patient if an IV is not established within two attempts or 90 seconds and that patient has one of the following:

- a. Altered mental status (GCS less than or equal to 8)
- b. Respiratory failure (SpO₂ less than or equal to 90% after appropriate oxygen therapy, respiratory rate less than 10 or greater than 40 breaths per minute) with alteration of mental status
- c. Profound hypovolemia or hemodynamic instability with alteration of mental status or other evidence of shock – recall, the use of an IO for volume resuscitation requires the use of a pressure bag/3-way stop-cock to achieve optimal flow rates
- d. Cardiac arrest (medical or traumatic)

Additionally, the provider may choose to utilize the IO route first in critical patients for whom IV access may be difficult.

After discussion with OLMC, may consider IO placement for the following conditions:

- a. Profound hypovolemia (Systolic BP less than 90 mmHg) without alterations in mental status or other evidence of shock
- b. Burn patients with bilateral upper extremity burns

*IO is CONTRAINDICATED in the following conditions

- a. Fracture of the tibia or femur in lower extremity placement or fracture of the humerus in upper extremity placement
- b. Infection at insertion site
- c. IO within the prior 24 hours in the same bone
- d. Knee or shoulder replacement (identified by midline vertical scar over the patella or anterior proximal humerus)
- e. Tumor near site
- f. Inability to locate landmarks
- g. Excessive tissue at insertion site
- h. IO access is not intended for prophylactic use

Approved Sites (one per bone): Per manufacturer recommendations. Consider humeral head placement preferentially due to proximity to central circulation, particularly in OHCA patients.

Paramedic: If infusion of medications or fluids causes significant pain, consider the following:

1. Adult: Consider lidocaine 2% (preservative free) 40 mg slow push followed by 10 mL Normal Saline flush. If pain continues, contact OLMC for OPTION of additional 20 mg bolus
2. Pediatric: Consider lidocaine 2% (preservative free) 0.5 mg/kg (MAX 40 mg) slow push followed by 10 mL Normal Saline flush. If pain continues, contact OLMC for OPTION of additional 0.25 mg/kg (MAX 20 mg) slow push

Definitions

IV means any balanced electrolyte solutions may be used, such as Lactated Ringers, Normal Saline and 5% Dextrose in Water. IV solutions, as defined in this document, DO NOT include other additives (such as potassium) or medications. Normal Saline is the fluid of choice for patients with history of renal failure, not Lactated Ringers. Recommended catheter size for rapid fluid resuscitation in adults is 14-18 gauge. If rapid fluid resuscitation is not required, smaller catheter sizes and heparin/saline locks may be used. Heparin used for this procedure is not considered a medication.

LVAD refers to Left Ventricular Assist Device

LVO refers to Large Vessel Occlusion, a type of stroke that may be amenable to fibrinolytic/endovascular therapy

LOC refers to Level of Consciousness

mCPR refers to mechanical CPR

MDPB means Maine EMS Medical Direction and Practices Board, which consists of the six Regional Medical Directors, a physician representing the Maine Chapter of the American College of Emergency Physicians, an At-Large physician representative, a Clinical Pharmacist or Toxicologist, the State Assistant EMS Medical Director and the State EMS Medical Director.

Neonate is an infant less than or equal to 28 days old.

NR means a non-rebreather oxygen mask.

O₂ means oxygen therapy as appropriate for patient.

OCME refers to Office of the Chief Medical Examiner

ODT refers to Orally Disintegrating Tablet, the formulation of oral ondansetron that may be administered by allowing the tablet to melt on the patient's tongue

OG refers to Oral-Gastric tube and should be considered in all intubated patients

OHCA refers to Out-of-Hospital Cardiac Arrest

On-Line Medical Control (OLMC) refers to the on-line physician/physician assistant/nurse practitioner who is licensed by the State of Maine and authorized by a hospital to direct emergency medical services personnel consistent with the protocols developed by the MDPB.

Definitions

Other Appropriate Destination means a facility that has been approved by the Board of EMS to receive, via ambulance, patients who are in need of emergency care.

Paramedic Back-up means use of an Advanced Life Support resource when a presenting patient needs more than Basic Life Support. In the prehospital setting, this indicates a *Paramedic* response. An ALS back-up agreement should be written between EMS provider services routinely offering and accepting ALS back-up support. This would establish medical/operational/ liability expectations of both services. These protocols cannot mandate any service to routinely offer or receive back-up. However, any decision in this regard, particularly to refuse to offer or accept ALS back-up, should be grounded in reasonable medical, operational, or financial considerations and should be reviewed by the individual service's legal counsel.

PCP refers to Primary Care Provider

Pediatric Patient in these protocols, means pre-pubertal (without pubic, axillary, or facial hair).

PO refers to the oral route of medication administration

POLST: Provider Orders for Life-sustaining Treatment

PPE refers to Personnel Protective equipment and includes gloves, gowns, masks, respirators, eye protection.

PPV is Positive Pressure Ventilation, such as (in order of preference): two-person bag-valve-mask technique with oxygen, one-person bag-valve-mask technique with oxygen, mouth-to-mask ventilation with oxygen, and mouth-to-mask ventilation without oxygen.

RTCs refers to Regional Trauma Centers in Maine: Central Maine Medical Center (CMMC), Northern Light Eastern Maine Medical Center (EMMC), and Maine Medical Center (MMC)

TIA refers to Transient Ischemic Attack which presents with stroke-like symptoms

TKO refers to an IV rate of "To Keep Open" and may vary according to IV tubing (usually 10-25 ml/hour)

TOR refers to Termination of Resuscitation

TPA refers to Tissue Plasminogen Activator, a fibrinolytic medication used to treat non-hemorrhagic stroke

VAD refers to Ventricular Assist Device