Reference: EMS Rules Section 515.550 (April 15, 1997); SOP eff. 6/1/14

I. POLICY

A. Assessments and initial interventions shall be performed on all pts at the point of contact unless it is unsafe, as circumstances allow, and the patient consents. Monitoring & intervention equipment/devices for EMS personnel to function to their level of licensure, in accordance with the level of service at which the EMS vehicle is operating must be brought to the patient so complete information is obtained that will allow treatment at the appropriate level of care without delay. Perform resuscitative interventions during the primary assessment as impairments are found.

B. Care should progress from BLS to ALS as required by patient condition, practitioner scope of practice, level of service, and System policy/procedure (2016 SOP IMC).

C. Appropriate disposition shall occur in compliance with System standards of care.

D. If a scene response, a reasonable search must be completed to determine if a patient is present – See policy A-1 (Abandonment) for full definition of a patient.

E. This policy shall be used as a guideline and should not be considered a replacement for good common sense, emergency responder judgment, and/or OLMC direction.

II. DEFINITIONS

A. **BASIC LIFE SUPPORT (BLS) SERVICES**

Basic Life Support Services or BLS Services – a basic level of pre-hospital and inter-hospital emergency care and non-emergency medical care that includes airway management, cardiopulmonary resuscitation (CPR), control of shock and bleeding and splinting of fractures, outlined as *Basic Life Support in the National EMS Educational Standards and any modifications to that curriculum* (standards) *specified in* this Part. (Section 3.10 of the Act) (6-14)

B. **ADVANCED LIFE SUPPORT (ALS) SERVICES**

Advanced Life Support Services or ALS Services – an advanced level of pre-hospital and inter-hospital emergency care and non-emergency medical care that includes basic life support care, cardiac monitoring, cardiac defibrillation, electrocardiography, intravenous therapy, administration of medications, drugs and solutions, use of adjunctive medical devices, trauma care, and other authorized techniques and procedures as outlined in the Advanced Life Support in the National EMS Educational Standards and any modifications to that curriculum (standards) *specified in* this Part. (Section 3.10 of the Act) (6-14)

III. SCOPES OF PRACTICE: Licensed EMTs/PHRNs

A. Any person licensed as an EMT, Paramedic or PHRN shall perform emergency and non-emergency medical services as defined in the EMS Act, in accordance with his or her level of education and licensure, the standards of performance and conduct prescribed by IDPH in rules adopted pursuant to the Act, and the requirements of the EMS System in which he or she practices, as contained in the approved Program Plan for that System. (Section 3.55(b) of the Act)

B. A person currently licensed as an EMT, Paramedic or PHRN may only practice or use his or her EMS license in out-of hospital situations, under the written or verbal direction of the EMS MD or his designee. An out-of-hospital care setting may include any location in which EMS personnel are authorized to practice under the direction of the EMS MD or his designee. EMS personnel shall always practice with appropriate communication equipment, equipment and drugs appropriate for the EMS practitioner's scope of practice, and the protocols of the EMS system, and shall operate only with the approval and under the direction of the EMS MD.

C. This does not prohibit EMS personnel from practicing within an ED or other health care setting for the purpose of receiving con-ed or training approved by the EMS MD.

This also does not prohibit EMS personnel from seeking credentials other than his or her EMT or paramedic license and using such credentials to work in an ED or other health care setting under the jurisdiction of that employer [Section 515.550(c) of the Rules].

D. **EMT-Bs** (EMTs) with System privileges in good standing may perform **BLS Services** as defined by IDPH, EMS Rules, NWC EMSS SOPs (2016) (see attached), and/or this policy using techniques specified in System standards of practice (Procedure Manual) with the following caveats **after appropriate education and competency assessment**:

1. **Monitoring**
   a. Apply an appropriate pulse oximetry sensor and interpret the findings.
   b. Apply $ETCO_2$ sensors

2. **Airway/ventilatory management**
   a. BLS airway access: position, OPA/NPA
   b. Obstructed airway maneuvers
   c. Oral suctioning
   d. Tracheal-bronchial suctioning of an already intubated pt.
   e. They are considered skilled assistants when an advanced airway is necessary and may perform lip retraction and anterior laryngeal pressure, but are not authorized to perform the procedure
   f. O2: NC, mask, NRM, BVM
   g. BiPAP, CPAP, PEEP
   h. Occlusive dressing applied to a penetrating chest wound

3. **Circulatory/cardiac management; vascular access**
   a. Quality CPR
   b. Control external bleeding using direct pressure, pressure dressings, hemostatic dressings and/or a tourniquet; wound care with dressings and bandages
   c. Use an AED if available pending an ALS response. AEDs are required on BLS vehicles or BLS MedEngines included in the EMS System plan.
   d. Application of 3-5 leads for ECG rhythm analysis
   e. 12L ECG acquisition & transmission/submission to OLMC
   f. They may not perform venous access but they may assist in preparing the IV solution and priming the tubing under the supervision of a paramedic.

4. **Psychomotor skills**
   a. Obtain and interpret a capillary blood glucose reading
   b. Monitoring of OG/NG tube already inserted
   c. Selective spine precautions
   d. Splinting/bandaging
   e. Vaginal delivery
   f. Application of limb restraints pending an ALS response
   g. Eye irrigation; eye patching, and stabilization of an impaled object in the eye pending an ALS response
   h. Assist an imminent vaginal delivery pending an ALS response

5. **Medications**
   a. ASA for chest pain PO
   b. Albuterol and ipratropium nebulized
   c. Calcium gluconate gel to a hydrofluoric acid burn pending an ALS response (optional per agency)

d. Diphenhydramine PO
e. Epinephrine (1mg/1mL) IM from vial
f. Glucagon IM or IN
g. Mark I or DuoDote autoinjector
h. Naloxone IN & IM
i. NTG sublingual (assist pt taking their own)
j. Ondansetron ODT

6. The NWC EMSS does not use activated charcoal or glucose gel

E. **Paramedics (PMs) or Prehospital RNs (PHRNs)** with System privileges in good standing may perform all BLS assessments/interventions and ALS Services as defined by IDPH, EMS Rules, and NWC EMSS SOPs and/or this policy using techniques specified in System standards of practice (Procedure Manual) with the following caveats after appropriate education and competency assessment. If a patient requires any additional drugs, solutions, additives, or appliances a qualified healthcare professional must accompany the patient.

1. **Advanced airway access**: Intubation by all approaches listed in the procedure manual; approved extraglottic airway; and needle and surgical cricothyrotomy
2. Use a bougie to facilitate videolaryngoscopy intubation and surgical cricothyrotomy
3. Insert an approved nasogastric tube into the gastric access port of a KING LTS-D to assist in stomach decompression
4. **Quantitative waveform capnography**: Confirm advanced airway placement, interpret adequacy of ventilation, perfusion, and metabolism
5. **Suction**: Oral and tracheal
6. **O_2 delivery**: automated transport ventilators as approved
7. Needle pleural decompression
8. **Vascular access**: Peripheral veins; saline lock; AV shunt if that is the only site available and the patient is unstable; IO access of tibia or proximal humerus using the EZ-IO driver on adults and children. If peripheral IV unsuccessful / not advised, may use central venous access devices already placed based on OLMC
9. ECG rhythm and 12 lead interpretation
10. Cardioversion, defibrillation, transcutaneous pacing
11. Chest compression mechanical CPR Device (approved devices only)
12. Administration of vaccines as authorized by IDPH and the EMS MD
13. Drugs/solutions as listed below.

Drugs/Solutions	Acceptable routes
Normal saline (0.9% NaCl)	IV, IO
Lactated Ringers solution	IV, IO
D_5W, D5/.45 NS; D5/.9 NS; D5/LR	IV/IO
Adenosine	IVP, IO
Albuterol	Nebulized, MDI
Amiodarone	IVP, IVPB (IO if no IV accessible)
Aspirin (ASA)	PO
Atropine	IVP, IO
Benzocaine 20%	Spray
Calcium gluconate gel 2.5%	Topical
*Cardizem (diltiazem)	IVP, IO
Dextrose 10%	IVPB (may connect onto an IO line)
Diazepam	IVP/IO/IR
Diphenhydramine	IVP, IM, IO, PO
Dopamine (alternate drug)	IVPB
Epinephrine 1mg/10mL	IVP, IO, nebulized

Drugs/Solutions	Acceptable routes
Epinephrine 1mg/1mL	IM
Etomidate	IVP (DAI: IO if responsive & no IV)
Fentanyl	IVP/IO/IN/IM
*Furosemide	IVP/ IM/IO
Glucagon	IVP/IO/IN/IM
*Heparin on a medication pump	IV pump
Ipratropium	nebulized
Ketamine	IVP/IN/IM (DAI: IO if responsive & no IV)
Ketorolac tromethamine injection (alternate)	IVP, IM
Lidocaine	IO (IVP OLMC)
Magnesium sulfate	IVP, IVPB, IO
Midazolam	IVP/IO/IN/IM
Morphine sulfate (alternate)	IVP, IM, IO, PCA pump
Naloxone	IVP, IN, IM, IO
Nitroglycerin	SL, spray, transcutaneous, IV on pump
Nitrous oxide	Inhaled
Norepinephrine	IVPB (may connect onto an IO line)
Ondansetron	ODT/IVP
Sodium bicarbonate	IVP, IO
*Steroids (Ex: methylprednisolone)	IVPB, nebulized
Tetracaine ophthalmic solution	topical gtts to eye
Verapamil	IVP/IO
*Vitamin additives to an IV	Added to IV solution

Medications noted with an * are not included in the SOPs and must be administered per transferring physician's written directions and OLMC authorization.

"Any drug listed in the SOPs and/or above that has a current abbreviation of "IV", "IVP", or "IVPB" may be transported on an IV pump by a system paramedic(s) without the assistance of a RN as long as that paramedic(s) have been trained/competencies on that IV pump"

14. **PMs/PHRNs ARE authorized to monitor and/or transport pts with the following:**
    a. Multilumen central line catheters (Hickman, Broviac); peripherally Inserted Central Catheters (PICC): (may not insert; may access based on OLMC order). EMS personnel may NOT access surgically implanted medication delivery systems such as Portacath, Medi-port, or LAS Port ®.
    b. Indwelling urinary catheters (may not insert)
    c. Long-term feeding tubes: Gastrostomy tube (GT) or Jejunostomy tube (JT)
    d. Tracheotomy tube (may insert new tube if existing tube becomes fully dislodged; may remove and reinsert inner cannula to clear obstruction)
    e. Surgical drains (may not access or manipulate)
    f. Ventricular shunts (may not access or manipulate)
    g. Ventricular assist devices – Always notify the VAD pager/Coordinator before any interventions. See SOP.
    h. Insulin pumps (may not access or manipulate)

15. **PMs, without Critical Care Paramedic certification, are NOT authorized to perform and/or independently monitor/transport patients with the following:**
    a. Chest tubes; arterial lines
    b. Intra-aortic balloon pumps; hemodynamic monitoring catheters (CVP/Swan-Ganz);

c. Ventilators (other than Univent or Autovent);
d. Blood or blood products infusing
e. Fetal monitoring: internal or external;
f. Intracranial pressure monitors; or
g. Cervical traction devices (Garner-Wells tongs, halo devices, etc.)

16. PMs without Critical Care Paramedic certification are NOT authorized to independently transport critically ill neonates in isolettes.

Patients with the appliances/devices or transport needs as listed in 15 and 16 must be accompanied by a qualified nurse, physician, respiratory therapist, and/or perfusionist unless the PM has Critical Care certification and an expanded scope of practice and is authorized to provide that care by the EMS MD.

17. **PMs are NOT authorized to perform the following:**
    a. Bimanual vaginal exams
    b. Rectal exams

F. A student, enrolled in an IDPH-approved EMS program, while fulfilling the clinical education and in-field supervised experience requirements mandated for licensure or approval by the System and IDPH, may perform approved procedures for their scope of practice in the hospital under the direct supervision of a physician licensed to practice medicine in all of its branches or a qualified registered professional nurse preceptor and during the field internship by a qualified PM preceptor, only when authorized by the EMS MD (Section 3.55(d) of the Act).

G. After appropriate agency plan submission, education, credentialing, and approval by IDPH and the EMS MD, EMTs and paramedics may be authorized to provide healthcare using patient-centered, mobile resources in the out-of-hospital environment that may include, but not be limited to, services such as conducting safety and wellness checks, providing telephone advice to 9-1-1 callers instead of resource dispatch; providing community paramedicine care, chronic disease management, preventive care or post-discharge follow-up visits; or transport or referral to a broad spectrum of appropriate care locations, not limited to hospital emergency departments.

IV. INITIATION OF CARE

A. Upon arrival at the scene, all EMS responders are to follow system SOPs with respect to responder safety, patient access, recognition and abatement of risk, application of personal protective devices/body substance isolation, patient assessment and initial interventions.

B. **The EMS MD has determined that the following minimum equipment should be taken with EMS personnel to the patient for use at point of patient contact:**

1. Assessment tools: Stethoscope, light source, BP cuff, glucose meter
2. Airway bag consistent with the responder's scope of practice. Ex. All responders should bring oral and nasal airways, suction and the ability to monitor pulse oximetry and $ETCO_2$. An ALS response should bring full advanced airway equipment.
3. Oxygen delivery and ventilatory devices (appropriate for scope of practice) and at least one cylinder (D or E) of oxygen filled to at least minimum inventory requirements
4. Open chest wound vented dressings and bleeding control supplies and equipment
5. BLS response: AED
6. ALS response: Monitor/defibrillator capable of noninvasive BP (MAP) monitoring; SpO_2 and $EtCO_2$ monitoring; 12 L transmission capability and at least one set of pace/defib pads; real-time CPR feedback device/capability.

7. ALS response: Vascular access and IV fluid supplies and equipment
8. ALS & BLS response: Drugs as specified in scope of practice.
9. Patient conveyance equipment/spine motion restriction devices if indicated
10. EMS Providers may expand on this minimum point of care response requirement as they find practical or necessary based on preliminary dispatch information.

C. **INITIATION OF BLS CARE**

Provided that scene safety is confirmed, BLS care **shall be initiated at the point of patient contact per the SOPs** for all patients requiring interventions consistent with the definition of BLS service per EMS Rules and this policy. Patients requiring the initiation of BLS care (that may or may not require further ALS interventions) may include, but not be limited to, the following:

1. Initial assessment findings within normal limits or not requiring ALS interventions.
2. Patients with an impaired airway requiring positioning, suctioning, and BLS adjuncts
3. Hypoxic patients requiring supplemental oxygen where hypoxia can be reversed by BLS O_2 delivery devices and not requiring ALS interventions per SOP
4. Hypoventilating or apneic patients that require ventilations per BVM pending an ALS response
5. Need to convert an open pneumothorax to closed
6. Patients in cardiac or respiratory arrest pending an ALS response
7. Bleeding controllable by direct pressure, hemostatic dressings and/or tourniquet and not requiring venous access and fluid resuscitation
8. Patients with altered mental status (AMS) and S&S consistent with opiate OD requiring administration of naloxone pending an ALS response
9. Patients with AMS and S&S consistent with hypoglycemia requiring administration of glucagon (pending an ALS response)
10. Patients with severe nausea requiring administration of ondansetron via ODT.
11. Patients with severe allergic reaction/anaphylaxis requiring administration of IM epinephrine per SOP pending an ALS response
12. Patients with mild respiratory distress and wheezing with a history of asthma or COPD requiring inhaled bronchodilators.
13. Isolated musculoskeletal trauma and soft tissue trauma requiring basic wound care and splinting pending an ALS response for pain management
14. Patients with suspected acute spine injury requiring extrication and/or selective spine motion restriction pending an ALS response
15. Childbirth and newborn care pending an ALS response
16. Acute illness or trauma without systemic implications and presenting in minimal distress
17. Long-term (chronic) diseases without new or acute distress

D. **INITIATION OF ALS CARE**

1. Provided that scene safety is confirmed, any patient with an actual or potential life-threatening condition or one requiring ALS services shall have the following assessments/interventions initiated/attempted, **if indicated**, **at the point of patient contact *prior to removal*** to the ambulance:
    a. Advanced airway access per System procedure if needed unless further attempts are contraindicated
    b. O_2 per transport ventilators unless contraindicated, pleural decompression

c. **Cardiac arrest management**: System recommends at least 5 EMS responders (combination of EMTs and PMs) for each cardiac arrest worked at the ALS level using the Pit Crew approach.

d. **ECG rhythm/12 lead interpretation/cardioversion/defibrillation/pacing**. See ACS SOP for details.

e. **Vascular access** if actual/potential volume replacement and/or IV medications needed prior to hospital arrival. See IMC & ITC SOPs for details. Vascular access should generally be performed enroute on patients meeting criteria for transport to a Level I or Level II Trauma Center or experiencing a stroke as specified in the SOPs.

f. **First line medications**: adenosine, albuterol, amiodarone, ASA, atropine, benzocaine spray, calcium gluconate gel (if available), diphenhydramine, etomidate, ketamine, ketorolac, epinephrine 1mg/1mL and 1mg/10mL, dextrose 10%, ipratropium, lidocaine, midazolam (diazepam if available), naloxone, NTG, nitrous oxide (opt), norepinephrine, ondansetron, and verapamil. Appropriate pain intervention should be done prior to splinting or removal from point of contact if patient is in severe discomfort.

2. If initial attempts at ALS interventions are unsuccessful, attempt a recommended back-up procedure and contact OLMC for further orders. DO NOT prolong scene time with persistent unsuccessful efforts at airway or venous access.

3. **Patients requiring ALS services include, but may not be limited to, conditions covered by the System SOP's; PLUS the following:**

a. Any persistent deviation from normal in the primary assessment or breath sounds

b. Patients with abnormal VS accompanied by signs of hypoxia (SpO2 <94), hyper- or hypocarbia ($ETCO_2$ <35 or >45), and/or hypoperfusion ($ETCO_2$ 31 or less plus altered mental status, VS and skin changes)

Guidelines for abnormal vital signs: ADULTS	
Pulse:	< 60 or > 100 or irregular rhythm; poor quality
Respiration:	< 10 or > 20 or abnormal pattern/effort/expansion
Systolic BP:	< 90 or > 150 mmHg (MAP < 65)

c. **PEDIATRICS** - See SOPs for normal and abnormal values

d. Chest/abdominal pain with positive assessment findings or GI bleeding

4. **ALS care should never be discontinued** once initiated unless a decisional patient refuses further intervention, they are given full disclosure of risk, a Refusal of Service has been appropriately executed, the patient's wishes are shared with OLMC while on the scene, and a physician or his/her designee grants permission to discontinue care.

5. If a patient has required any continuous monitoring during transport (ECG, SpO_2, $EtCO_2$ or capnography), or any other continuous interventions while under EMS care (CPR, oxygen, assisted ventilations, etc.), those assessments and/or interventions shall continue until responsibility for the patient is transferred to ED personnel unless specially authorized to stop by OLMC. They shall not be discontinued in the ambulance for transfer into the hospital.

6. If scene, patient and/or rescuer safety is questionable or if EMS personnel are confronted with an uncooperative patient, the requirements to initiate BLS or ALS care at point of patient contact or during transport may be waived in favor of

assuring that safety is protected and the patient is transported to an appropriate facility. Contact OLMC to discuss the situation prior to leaving the scene. Clearly document the circumstances leading to an abbreviation of customary practice.

E. **In-field service level upgrades**

1. All transfer of care decisions shall be made under the immediate direction of the nearest system hospital OLMC who shall determine the risk/benefit and appropriateness of a service level upgrade. Also see policy A-1.
2. BLS personnel at the scene of an emergency shall allow any ILS or ALS ambulance personnel at the scene access to the patient, for the purpose of assessing whether ILS or ALS care is warranted. If the ILS or ALS personnel determine that the patient requires ILS or ALS care, the BLS personnel shall transfer care of that patient to the ILS or ALS personnel.
3. If a patient is being initially treated in the field by BLS personnel and they identify that ALS monitoring or interventions are necessary, the BLS crew shall request an ALS response from the local municipal EMS agency, unless the initial responders are employees of a private provider and the private provider can provide an ALS response within six minutes.
4. Transfer of care shall not be initiated in either of the above scenarios if it would appear to jeopardize the patient's condition. If the BLS crew can transport to the nearest hospital faster than the local municipal ALS team can arrive, the BLS team shall contact the nearest System hospital OLMC, inform them of the patient's situation and ETA to the nearest hospital, seeking authorization to transport the patient immediately, providing BLS care enroute.
5. **When care is transferred from one EMS crew to another, the first responding personnel shall**
   a. remain with the patient and continue to provide appropriate care within their scope of practice according to System standards of care until patient responsibility is transferred to the transporting team;
   b. provide a verbal report to the transporting personnel that includes assessment and treatment data current to the point of transfer;
   c. complete a patient care report which notes patient assessment and treatment data current to the point of transfer; and
   d. provide a copy of their written report to the receiving hospital as soon as possible. See Policy A-1 Abandonment and R6 Refusal of Care policy.

V. **CHRONICALLY DISABLED/IMPAIRED PATIENTS**

If EMS is dispatched to a patient who has a chronic, debilitating condition, but who appears stable with no new or acute findings, and the total scene and transport time is less than five minutes, they shall advise the receiving hospital of the situation and may request permission to abort ALS care in favor of immediate transport. At all times, the patient's needs, based on the present medical condition, must dictate the level of care delivered.

EMS Scopes of Practice

Includes IDPH additional Standards exceeding the National EMS Education Standards and National Scope of Practice Model as adopted by Region IX EMS MDs

See local policies/ procedures for details	EMR	EMT [BLS]	Paramedic/PHRN [ALS]
Monitoring	• Apply an appropriate pulse oximetry (SpO_2) sensor • Blood glucose monitoring	• Capnography monitoring • Interpret SpO_2 findings	• Blood chemistry analysis (point of care testing • ECG rhythm & 12 L interpretation
Airway/ventilatory management Oxygen delivery	• BLS airway access: position, OPA/NPA • Pulse oximetry	• Obstructed airway maneuvers • Oral suctioning • Tracheal-bronchial suctioning of an already intubated pt. • Capnography monitoring • O2: NC, mask, NRM, BVM • BiPAP, CPAP, PEEP • *Alternate extraglottic airways* • Occlusive dressing applied to a penetrating chest wound	• Magill forceps for airway FB removal • Stoma suctioning • Tracheostomy tube replacement through a stoma • *Intubation: Adult & peds (bougie)* • Extraglottic airways (NG in gastric port) • Needle/*surgical* Cricothyrotomy • Use of transport ventilators • Needle pleural decompression
Circulatory/cardiac mgt Vascular access	• Quality CPR • Hemorrhage control: Direct pressure; tourniquet • AED use	• Applications of 3-5 leads for ECG rhythm analysis • 12L ECG acquisition & submission to OLMC • Hemorrhage control: use of hemostatic agents • Spiking IV bag; priming tubing for vascular access	• ECG rhythm & 12L interpretation • Manual defibrillation; synchronized cardioversion • Transcutaneous pacing • Obtaining a blood sample • Vascular access: peripheral veins, IO (adult & peds) • Accessing central venous devices already placed based on OLMC
Psychomotor skills	• Use of backboard • Application of C-collar	• Monitoring of OG/NG tube already inserted • Selective spine precautions • Splinting/bandaging • Vaginal delivery • Limb restraints	• Eye irrigation *w/ Morgan lens* • Assess JVD & pulsations • Targeted temperature mgt after ROSC • ALS burn care • Protective equipment removal • Monitoring indwelling urinary catheter already placed
Preparation and administration of drugs by the routes listed for all ages			
Pharmacology Medication administration	• ASA for chest pain PO • Oral glucose/glucose paste • Epinephrine: Assisted administration of pt's autoinjector • Epinephrine autoinjector • Naloxone IN; autoinjector IM	• Albuterol nebulized • Calcium gluconate gel • Diphenhydramine PO/ IM • Ipratropium bromide nebulized • Epinephrine (1mg/1mL) IM from ampule or vial • Glucagon IM or IN • Mark I or DuoDote autoinjector • Naloxone IN & IM • NTG sublingual (assist pt taking their own) • Ondansetron ODT	PO, IN, IM, IVP, IVPB, IO, SL, topical, IR depending on drug • Adenosine; Amiodarone • Atropine sulfate • Benzocaine spray • Benzodiazepines • Cyanide antidotes • Dextrose 10% IVPB • Diphenhydramine • Epinephrine 1mL/10 mL • Etomidate/ketamine • Fentanyl/morphine/ketorolac • *Furosemide* • Lidocaine 2% • Magnesium sulfate • Naloxone; Norepinephrine, NTG • *Nitrous oxide (optional)* • Ondansetron • Sodium bicarbonate • *Steroids* • Tetracaine ophthalmic solution • Verapamil • Vaccinations in approved program

Practice privileges are cumulative from EMR to Paramedic