Region II: **Central MA EMS Corporation**

Topic **ALS/BLS Interface**

Preamble

1. EMTs, at all levels, are required to have OEMS approved training to prepare them to work in a Paramedic/Basic or Paramedic/Intermediate staffing configuration.
2. The following outline is a guideline and skills and times may be adjusted to meet service specific needs, number of students, and requirements as established and approved by the Affiliate Hospital Medical Director.
   OEMS mandates a minimum of four (4) hours for initial ALS/BLS Interface training.
3. The interactive outline format incorporates patient simulated scenario skills practice into each section to allow the instructor(s) to teach, remediate, and evaluate during each section.
4. Individual Program Coordinators and/or instructors are responsible for applying for OEMS approved EMS credits within the appropriate EMS Region to ensure the course will conform with the standards set forth in the outline.
5. The ambulance service must maintain a copy of the OEMS attendance roster and associated skills documentation for each student

Purpose To prepare EMTs working in a Paramedic-Basic, Paramedic/Intermediate, and/or Intermediate/Basic staffing configuration to better facilitate patient care during emergencies and Inter-facility transfers while meeting the requirements of 105 CMR 170.305 (C) and MDPH/OEMS AR 2-260

Frequency EMTs staffing at the P/B, P/I, or I/B level **must complete a two (2) hour review of this training every two years** (through continuing education or refresher training)

Prerequisite MA certified EMT-Basic (minimum)

Restrictions Hands-on practice is limited to the OEMS approved Scope of Practice for each level

Objectives The student will

- demonstrate appropriate use of OPA, NPA, BVM, NC, Simple, & NRB
  assist with a manikin intubation, including:
  -identifying intubation equipment (handles, blades, ETT, holders)
  -applying cricoid pressure, if needed
  -ventilating intubated manikin with BVM
- identify ETc02, Easy Cap
- identify Combitube, King, LMA, Bougie, CPAP
- state the signs/symptoms of hypoxia
- state the causes of false Pulse Oximetry & Pulse CO-Oximetry readings
- demonstrate use of Pulse Oximetry & Pulse CO-Oximetry
- turn on cardiac monitor & demonstrate proper lead placement
- retrieve cardiac monitor summary data
- replace cardiac monitor paper
- demonstrate "spiking" an IV bag
- prepare tape for securing an IV
- identify an IO, including automatic spring loaded devices
- state meds allowed to assist/administer including indications/contraindications
- select and demonstrate the appropriate use of BLS approved meds
- state the indications and contraindications of albuterol
- demonstrate the assembly of a nebulizer
- state the indications and reference the protocols for Blood Glucose Monitor use
- demonstrate the appropriate use of a Blood Glucose Monitor

Methods Interactive verbal presentation, skills sessions, and patient simulated scenarios

Faculty MA certified EMT-Paramedic with knowledge of the role of the Affiliate Hospital Medical Director and quality assurance

References
MGL c.111C (state law governing EMS)
105 CMR 170.000 (EMS system regulations)
MGL c 94C (controlled substances act)
105 CMR 700.000 (controlled substances regulations)
105 CMR 130.1401-1404 (hospital licensure regulations)
MDPH/OEMS Administrative Requirement 2-260 (Standards for ALS/BLS Interface Training)
MDPH/OEMS Administrative Requirement 5-509 (ALS Inter-facility Transfers)
MDPH/OEMS EMS Pre-hospital Treatment Protocols, current edition
Equipment related manufacturer's instructions, as applicable

Resources
Ambulance equipment to support skills indicated
Manikins and skills trainers as needed to support skills indicated
MDPH/OEMS Administrative Requirement 2-260 (1 per student)
Course Evaluation (1 per student)
Official OEMS Attendance Roster (1 per class)

Evaluation
Skills evaluation (attached)
Verbal evaluation through Q & A

Remediation Students identified as having difficulty achieving competency may require additional focused instruction and practice with an instructor or the Affiliate Hospital Medical Director

Outline

I Paramedic Assistant Introduction
A. Introductions: Instructor(s) & Students
B. Course Logistics: Emergency Exits, Restrooms, Phone Use
C. Objectives
D. Agenda

II Verbal Presentation
A. Team Concept / Roles & Scope of Practice
1. EMT-Basic (may not initiate, administer, or perform any ALS skill)
2. EMT-Intermediate
3. EMT-Paramedic
B. Medical-Legal / Communications & Documentation
1. Discuss relevant MGLs and EMS & Hospital regulations (see References)
2. Distribute & discuss MDPH/OEMS AR 2-260 (required)
3. Verbal report upon transfer of care on scene and at hospital
4. CMED entry notification
5. Documentation of the Patient Care Report (aka Trip Record)

III Skills/Scenario Stations
A. Airway Management
1. BLS Equipment: OPA, NPA, BVM, NC, Simple, NRB
2. Airway Structures
3. Cricoid Pressure
4. ALS Equipment / intubation handles, blades, ETT, Holders
5. Confirmation of intubation / breath sounds, ETc02, Easy Cap
6. Alternate airways / Combitube, King, LMA, Bougie

7. Overview of brand specific CPAP setup
8. ETCO2 / placement, values, ventilation rate
9. Scenario-based skills: intubation manikin or simulator
10. The EMT-B may not:
    a. assemble or operate an automated ventilator
    b. assemble or test devices (including laryngoscopes)
    c. insert any advanced airway
    d. auscultate breath sounds for tube placement
    e. assemble capnography device or equipment

B. Pulse Oximetry & Pulse CO-Oximetry
1. Indications / Signs & Symptoms of hypoxia (treat Pt not device)
2. Probe Placement
3. Causes of false readings (nail polish, smoker, temperature and circulation of Pt)
4. Interpretation
5. Practical Skills: patient simulation

C. Cardiac Monitor / Manual Defibrillator
1. Overview of STEMI Point-of-Entry / Cath Lab (PCI) Hospitals
2. Overview of the monitor / brand specific options (including replacing tracing paper)
3. 3-4 Lead Placement / Prep of patient / landmarks
4. 12 Lead Placement / Prep of patient / landmarks
5. Transmitting 12 lead
6. NIBPM, O2 sat, end tidal monitoring
7. Practical Skills: patient simulation
8. The EMT-B and EMT-I may not:
   a. operate, charge, or defibrillate using a manual defibrillator
   b. interpret or otherwise read the cardiac tracing

D. Intravenous Access
1. The EMT-B and EMT-I may not obtain blood samples or fill blood sample tubes
2. Fluids / Sizes, lettering, color, clarity, date, fluid temp (warm vs cold bags) "*5 rights*"
3. Drip Sets / GTTs size selection for Pt.
4. Spiking the bag
5. IV catheters (sizes)
6. Set up / equipment and supplies needed
7. Lab draw sets
8. Pressure infusers
9. Intaosseous (IO), including automatic spring loaded devices
10. Sharps containers
11. Practical Skills: IV / IO skills trainers
12. The EMT-B may not:
   a. apply a tourniquet for IV
   b. cleanse the IV site
   c. perform venipunture
   d. handle or dispose of needles

E. Medications
1. Review meds allowed to administer including indications/contraindications
   a. aspirin (Acute Coronary Syndrome Protocol 1.5)
   b. activated charcoal (Toxicology / Poison / Substance Abuse / OD Protocol 3.13)
   c. epinephrine auto-injector (Allergic Reaction/Anaphylaxis Protocol 3.2)
   d. nerve agent antidotes (e.g., Mark 1) (Nerve Agent Exposure Protocol 2.6)
2. Review meds allowed to assist including indications/contraindications
   a. prescribed nitroglycerin (Acute Coronary Syndrome Protocol 1.5)

b. prescribed inhalers (Bronchospasm / Respiratory Distress Protocol 3.4)

3. Scenario-based skills: patient simulation with appropriate trainers
4. The EMT-B and EMT-I may not retrieve or prepare drugs for administration (may retrieve drug or IV box/bag only)

F. Nebulized Medications

1. Review of Bronchospasm / Respiratory Distress Protocol 3.4
2. Indications and contraindications of albuterol
3. Airborne Pathogens (including flu)
4. Assembly
5. Proper oxygen concentration
6. Use of nebs with NRB
7. Practical Skills with appropriate equipment

G. Blood Glucose Monitor

1. Assessment & Protocol Review
   a. Altered Mental / Neurological Status Protocol 3.3
   b. Acute Stroke Protocol 3.11
   c. Diabetic Emergencies Protocol 3.16
2. Bloodborne Pathogens
3. Obtaining sample
4. Results and Treatment
5. Scenario-based skills: patient simulation

IV Conclusion

A. Summary
B. Questions / Answers
C. Course Evaluation
D. OEMS Roster

Name_____ EMT#_____ Date_____

ALS/BLS Interface Skills Performance

Examiner:
Assess each skill as indicated. Place a check in the S column if skill is completed successfully.
Have instructor remediate student if skill is not completed successfully.
Place a check in the R column if student completes skill successfully following remediation.

	S	R
Airway Management		
1. Demonstrate appropriate use of OPA, NPA, BVM, NC, Simple, & NRB		
2. Given a scenario, assist with a manikin intubation, including:		
a). identifying intubation equipment (handles, blades, ETT, holders)		
b). applying cricoid pressure, if needed		
c). ventilating intubated manikin with BVM		
3. Identify ETc02, Easy Cap		
4. Identify Combitube, King, LMA, Bougie, CPAP		
Pulse Oximetry & Pulse CO-Oximetry		
1. State the signs/symptoms of hypoxia		
2. State the causes of false readings (nail polish, smoker, temperature & circulation of pt)		
3. Demonstrate use of Pulse Oximetry & Pulse CO-Oximetry		
Cardiac Monitor/Manual Defibrillator		
1. Turn on cardiac monitor & demonstrate proper lead placement		
2. Retrieve cardiac monitor summary data		
3. Replace cardiac monitor paper		
Intravenous Access		
1. Demonstrate "spiking" an IV bag		
2. Prepare tape for securing an IV		
3. Identify an IO, including automatic spring loaded devices		
Medications		
1. State the indications/contraindications for each medication allowed to assist/administer		
2. Given a scenario, select and demonstrate the appropriate use of the following meds:		
a). aspirin (Acute Coronary Syndrome Protocol 1.5)		
b). activated charcoal (Toxicology / Poison / Substance Abuse / OD Protocol 3.13)		
c). epinephrine auto-injector (Allergic Reaction/Anaphylaxis Protocol 3.2)		
d). nerve agent antidotes (e.g., Mark 1) (Nerve Agent Exposure Protocol 2.6)		
e). prescribed nitroglycerin (Acute Coronary Syndrome Protocol 1.5)		
f). prescribed inhalers (Bronchospasm / Respiratory Distress Protocol 3.4)		
Nebulized Medications		
1. State the indications and contraindications of albuterol		
2. Demonstrate the assembly of a nebulizer		
Blood Glucose Monitor		
1. State the indications and reference the protocols for Blood Glucose Monitor use		
2. Given a scenario, demonstrate the appropriate use of a Blood Glucose Monitor		

I attest that the EMT named above successfully completed each skill as indicated.

Lead Examiner_____Signature_____