



**St. Clair County
SYSTEM**

**ENHANCED PARAMEDIC INTERFACILITY TRANSPORTS
CRITICAL CARE INTERFACILITY PATIENT TRANSPORTS
(OPTIONAL)**

Initial Date: June 28, 2023
Revised Date:

Section: 8-15a

***Enhanced Paramedic Inter-Facility Patient Transfers and Critical Care
Interfacility Patient Transports***



Paramedic Use Only

Purpose: To expand the Scope of Practice for ALS EMS providers in the performance of Interfacility Patient Transfers through the requirement of additional education and training.

- Medical Control Authorities choosing to adopt this protocol for **Enhanced Paramedic Inter-Facility Transfers** may do so by selecting this check box.

- Medical Control Authorities choosing to adopt this protocol for **Critical Care Inter-Facility Transfers** may do so by selecting this check box.

ENHANCED PARAMEDIC INTER-FACILITY PATIENT TRANSFERS

A. Training:

Only personnel trained under an approved MDHHS and MCA Expanded Scope curriculum may utilize the listed medications or procedures included in this addendum during interfacility transfers without additional/accompanying staff. See **Inter-Facility Patient Transfer Protocol**.

B. Medications:

1. The following medications/fluids (to a maximum of three simultaneously) may be continued during transport by MCA approved ALS personnel. These medications may require the use of an IV infusion pump which will be supplied by the sending facility or the ALS provider. The medications may be monitored by the attending paramedic only and may NOT be titrated or started as a new infusion. Should complications arise, infusions must be discontinued, and medical control contacted. Paramedics must receive training in the use of these medications (per MCA Selection)



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<ul style="list-style-type: none"> • Amiodarone 	<ul style="list-style-type: none"> • Keppra
<ul style="list-style-type: none"> • Antibiotics 	<ul style="list-style-type: none"> • Magnesium Sulfate
<ul style="list-style-type: none"> • Antifungals 	<ul style="list-style-type: none"> • Nexium (esomeprazole)
<ul style="list-style-type: none"> • Antihistamines 	<ul style="list-style-type: none"> • Nitroglycerin
<ul style="list-style-type: none"> • Antivirals 	<ul style="list-style-type: none"> • NSAIDs
<ul style="list-style-type: none"> • Beta Agonists 	<ul style="list-style-type: none"> • Oxytocin (Pitocin)
<ul style="list-style-type: none"> • Beta Blockers 	<ul style="list-style-type: none"> • PCA Pumps (closed systems)
<ul style="list-style-type: none"> • Blood—see Blood Product protocol • Calcium Channel Blockers • Calcium Gluconate • Colloids/Crystalloids/Lipids • Dextrose • Glycoprotein IIa/IIIB Inhibitors • Heparin • Insulin Pumps (closed Systems) • Lidocaine 	<ul style="list-style-type: none"> • Pepcid (famotidine) • Potassium (up to 20 mEq) • Protonix (pantoprazole) • Sodium Bicarbonate • TPN (Total Parenteral Nutrition) • Tranexamic Acid (TXA) • Vitamins • Zantac (ranitidine) • Sandostatin (octreotide)

1. Medications used from an ALS medication bag will be recorded by the paramedic, per the appropriate medication usage form. Upon arrival at the receiving facility the medication box will be exchanged per protocol. If the receiving facility is outside the West Michigan Regional Drug Bag Exchange program participation area, replacement of the medication box is the responsibility of the sending facility.

2. EMS documentation of the interfacility transfer must include the interventions performed en-route and documentation of personnel involved in specific patient care activities.

A. Skills:

Ventilators: [V]

Paramedics may maintain and adjust mechanical ventilation as ordered by a sending facility limited to the non-intubated patient or patient receiving non-invasive positive pressure ventilation.

Insulin: [I]

Paramedics may administer insulin by subcutaneous injection, IV drip or closed system continuous infusion pump based on written orders obtained from the sending facility/attending physician.



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ENHANCED PARAMEDIC INTER-FACILITY TRANSPORT CURRICULUM

COURSE OUTLINE

2. Ventilator patient concerns (3 hr 15 min)
 - A. Types of ventilators
 - B. A/C, NPPV, CPAP, PEEP
 - C. Use of transport ventilators
 - D. Complications
 - E. Use of Pulse Oximeter/Capnography
3. Maintenance of invasive lines (30 min)
 - A. Central lines
4. Equipment Training (2 hours)
 - A. IV pumps
5. Blood Products (1 hr 45 min)
 - A. Whole Blood/Packed RBCs/Plasma
6. Cardiology (4 hours)
 - A. Anatomy and physiology
 - B. 12 lead ECG monitoring
 - a. AMI recognition
 - C. Axis determination
 - D. Bundle Branch Blocks and Hemiblocks
 - E. ECG findings
 - F. Cardiac disease/conditions
 - G. Electrophysiology
7. Pharmacology (4 hours)
 - A. Vasodilators and antihypertensives
 - B. Histamine Antagonist and Proton Pump Inhibitors
 - C. Antiemetics/GI
 - D. Antiarrhythmics
 - E. Anticoagulants
 - F. Sedatives and Analgesics
 - G. IV fluids
 - H. Electrolytes
 - I. Antibiotics
 - J. Miscellaneous
8. Obstetrics (2 hours)
 - A. Anatomy and Physiology
 - B. Assessment and monitoring
 - C. Complications
 - D. Pregnancy related conditions
 - E. Fetal assessment and monitoring
 - F. Trauma considerations



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9. Neonates (1 hour)
 - A. Anatomy and Physiology
 - B. Assessment and stabilization
10. Pediatrics (2 hours)
 - A. Anatomy and Physiology
 - B. Assessment and stabilization
 - C. Growth and development
 - D. Management
 - a. Airway/respiratory
 - b. Cardiac
 - c. Trauma
 - d. Special considerations
11. Documentation (3 hours)
12. Case Presentations and Scenarios/Simulation (2 hours)
13. Written and Practical Examinations (4 hours)

Critical Care Patient Inter-Facility Transport Requirements

Purpose: To provide hospital facilities, physicians, and medical transport personnel with guidelines to facilitate inter-facility transportation of critically sick and injured patients within Advanced Life Support vehicles.

1. Vehicle and Staffing Policy
 - A. MDHHS Vehicle License. All vehicles conducting Critical Care Inter-Facility Patient Transports must be licensed as transporting Advanced Life Support (ALS) vehicles.
 - B. Equipment. The following is the minimum equipment that will be carried by an ALS vehicle while it is providing Critical Care Inter-Facility Patient Transport, in addition to the equipment required by Part 209, P.A. 368 of 1978, as amended, and local medical control authority protocols:
 - a. Waveform Capnography
 - b. Portable Ventilator or staff capable of providing ventilatory support
 - c. Portable Infusion Pump(s)
 - d. Pressure infusion bag(s)
 - C. Staffing
 - e. All ALS vehicles that conduct Critical Care Inter-Facility Patient Transports will be staffed in accordance with local medical control requirements with at least one (1) paramedic trained in the Critical Care Inter-Facility Patient Transport curriculum. The trained paramedic must be in the patient compartment while transporting the patient.



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- f. The above requirement for staffing does not apply to the transportation of a patient by an ambulance if the patient is accompanied in the patient compartment of the ambulance by an appropriately licensed health professional designated by a physician and after a physician-patient relationship has been established as prescribed. (PA 368, Section 20921(5)).
2. Critical Care Inter-Facility Patient Transport Physician Director/Quality Improvement
 - A. Ambulance services that utilize this protocol must designate a Critical Care Inter-Facility Patient Transport Physician Director.
 - B. The Critical Care Inter-Facility Patient Transport Physician Director will be responsible for:
 - a. Oversight of a quality improvement program for Critical Care Inter-Facility Patient Transports
 - b. Oversight of the training curriculum for EMS personnel trained under this protocol.
3. Critical Care Inter-Facility Patient Transport Curriculum

CRITICAL CARE PATIENT INTER-FACILITY TRANSPORT CURRICULUM

COURSE OUTLINE

1. Ventilator patient concerns (4 hours total)
 - A. Types of ventilators
 - B. IPPB, SIMV, PEEP, CPAP
 - C. Use of transport ventilators
 - D. Complications
 - E. Use of Pulse Oximeter/Capnography
2. Chest Tubes and Pleurovac (1 hour)
 - A. Principles of pleural cavity evacuation
 - B. Maintaining chest tubes
 - C. Review various systems
 - D. Pleurovac Practical Lab
3. Maintenance of invasive lines (2 hours)
 - A. Types of hemodynamic monitoring
 - a. Various equipment
 - b. Insertion sites
 - c. Maintaining infusions
 - d. Complications
4. Equipment Training Videos (1 hour)
 - A. IV Pumps
 - B. Ventilator
 - C. 12 Lead Monitoring
5. Thrombolytics (1 hour)
 - A. Indications, contraindications, adverse effects, and administration

MCA Name: St. Clair MCA

MCA Board Approval Date: 06/28/23

MDHHS Approval Date : 07/28/2023

MCA Implementation Date: 09/01/2023



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- a. Streptokinase
 - b. tPA
 - c. Retavase
 - d. TNKase
 - e. Heparin
 - f. Lovenox
6. Interpreting blood gases (1 hour)
 - A. The use of ABGs in ventilator managements
 7. Blood products (1 hour)
 - A. Whole blood/Packed RBCs/Plasma
 8. Cardiac Enzymes (1 hour)
 - A. Cardiac physiology and the meaning of enzyme abnormalities
 9. Vasoactive drugs (2 hours)
 - A. Indications, contraindications, adverse effects, and administration
 - a. Dopamine
 - b. Epinephrine
 - c. Dobutamine
 - d. Levophed
 - e. Amrinone/Milrinone
 - f. Nitroglycerin
 - g. Nitroprusside
 - h. Esmolol
 - i. Labetalol
 10. Critical Care Patient Transport Protocol Review (1 hour)
 - A. Protocol review and miscellaneous drugs
 - a. Indications, contraindications, adverse effects, and administration
 1. Aminophylline
 2. Mannitol
 3. Phenytoin
 4. Insulin
 5. Propofol
 6. Oxytocin and related drugs
 11. Paralytics (1 hour)
 - A. Indications, contraindications, adverse effects, and administration
 - a. Non-depolarizing neuromuscular blockers
 - b. Sedatives during paralytic maintenance
 - c. RSI indications during critical care patient transport
 - B. Administer with Medical Control
 12. Practical Lab (1 hour)
 - A. IV Pumps
 - a. Various tubing
 - b. Maintaining a drip while changing to the pump
 - B. Ventilator
 - C. 12 Lead
 - D. CO2 detector
 13. Cardiac Physiology/12-Lead ECG (4 hours)
 - A. Cardiac physiology and cardiac drug review
 - a. Indications, contraindications, adverse effects, and administration



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1. Lidocaine/Procainamide
2. Potassium
3. Morphine
4. Cardizem
5. Amiodarone
14. 12-Lead AMI Recognition (2 hours)
15. High Risk Pregnancy (1 hour)
 - A. Indications, contraindications, adverse effects, and administration
 - a. Magnesium Sulfate
 - b. Pitocin
16. Antibiotics (1 hour)
17. Pediatrics (4 hours)
 - A. Pediatric Airway and Ventilation management including Ventilator Dynamics and Chest Tube Monitoring and pneumothorax recognition and treatment (1 hour)
 - B. Pediatric fluid requirements including maintenance and bolus therapies (1 hour)
 - C. Pain management (1 hour)
 - D. Case studies, trauma specific (1 hour)
18. Critical Care Patient Transport Charting (1 hour)
19. Critical Care Patient Transport Call: Start to Finish (1 hour)
 - A. General considerations
 - B. Staffing and quality management considerations
 - C. When to refuse a call
20. Critical Care Patient Transport Case Presentations (1 hour)
21. Daily Quizzes
 - A. Ventilators, chest tubes, invasive lines
 - B. Thrombolytics, ABGs, blood, enzymes, pressers, paralytics
22. Written and Practical Exam (4 hours)