



# EMS System for Metropolitan Oklahoma City and Tulsa 2019 Medical Control Board Treatment Protocols



Approved 3/13/19, Effective 6/1/19, replaces all prior versions

## 4I - SPECIFIC CAUSES OF CARDIAC ARREST ADULT & PEDIATRIC

### TREATMENT PRIORITIES:

1. Circulatory support
    - Apply ResQCPR® within 2 minutes
    - Chest compression rate 80/min ResQCPR®
    - Chest compression rate 110/min
    - Appropriate compression depth & full recoil
    - Limit pauses in compressions
    - Timely defibrillation (if indicated)
    - Utilize Res-Q-Pod®
    - If hyperkalemia, calcium chloride first medication
  2. Oxygenation/Ventilation support
    - Avoid hyperventilation in rate & volume
    - Use waveform capnography (if equipped)
- \*\*Mandatory use if patient intubated

**EMERGENCY MEDICAL  
DISPATCHER**

**EMERGENCY MEDICAL  
RESPONDER**

**EMT**

**EMT-INTERMEDIATE 85**

**ADVANCED EMT**

**PARAMEDIC**

**EMR**

**EMT**

FIND POSSIBLE CAUSES OF CARDIOPULMONARY ARREST & TREAT WHERE APPROPRIATE:

- HYPOXIA** – OXYGENATION/VENTILATION WITH 100% O<sub>2</sub>
- HYPOKALEMIA** – RAPID TRANSPORT
- PRE-EXISTING ACIDOSIS** – OXYGENATION/VENTILATION WITH 100% O<sub>2</sub>
- PRE-EXISTING HYPOTHERMIA** (PROLONGED COLD EXPOSURE) – REWARM PATIENT
- CARDIAC TAMPONADE** – RAPID TRANSPORT
- THROMBOSIS (AMI OR PE)** – RAPID TRANSPORT
- TRAUMA** – SEE APPROPRIATE TRAUMA PROTOCOLS
- TOXINS/DRUG OVERDOSE – SUSPECTED NARCOTIC/OPIATE**  
ADULT: NALOXONE 2 mg IN, MAY REPEAT ONCE  
PEDIATRIC: NALOXONE 0.5 mg IN, MAY REPEAT ONCE

**EMT-I85**

**AEMT**

FIND POSSIBLE CAUSES OF CARDIOPULMONARY ARREST & TREAT WHERE APPROPRIATE:

- HYPOVOLEMIA**  
ADULT: 1 LITER NS IV/IO BOLUS IF NO SIGNS OF PULMONARY EDEMA  
PEDIATRIC: 20 mL/kg NS IV/IO BOLUS IF NO SIGNS OF PULMONARY EDEMA
- HYPOGLYCEMIA** (GLUCOSE <50 mg/dL) - **ADULT & PEDIATRIC**  
D10 5 mL/kg IVPB WIDE OPEN UP TO 250 mL OR  
D25 2 mL/kg IV/IO UP TO 100 mL (must be ≥ 1 year of age) OR  
D50 1 mL/kg IV/IO UP TO 50 mL (must be ≥ 25 kg)
- CARDIAC TAMPONADE**  
ADULT: 500 mL NS IV/IO BOLUS IF NO SIGNS OF PULMONARY EDEMA  
PEDIATRIC: 10 mL/kg NS IV/IO BOLUS IF NO SIGNS OF PULMONARY EDEMA
- ADVANCED EMT OR HIGHER LICENSE:**  
**TOXINS/DRUG OVERDOSE – SUSPECTED NARCOTIC/OPIATE**  
ADULT: NALOXONE 2 mg IVP/IO, MAY REPEAT ONCE  
PEDIATRIC: NALOXONE 0.5 mg IVP/IO, MAY REPEAT ONCE

**PARAMEDIC**

FIND POSSIBLE CAUSES OF CARDIOPULMONARY ARREST & TREAT WHERE APPROPRIATE:

- HYPERKALEMIA** – CALCIUM CHLORIDE 10 mg/kg IVP/IO (MAX 1 gram) & SODIUM BICARBONATE 1 mEq/kg IVP/IO (MAX 50 mEq)
- PRE-EXISTING ACIDOSIS** - SODIUM BICARBONATE 1 mEq/kg IVP/IO (MAX 50 mEq)
- TOXINS/DRUG OVERDOSE – SUSPECTED TRICYCLIC ANTIDEPRESSANT** - SODIUM BICARBONATE 1 mEq/kg IVP/IO (MAX 50 mEq)
- TOXINS/DRUG OVERDOSE – SUSPECTED BETA BLOCKERS**  
ADULT: GLUCAGON 1 mg IVP/IO  
PEDIATRIC: GLUCAGON 0.5 mg IVP/IO
- TOXINS/DRUG OVERDOSE – SUSPECTED CALCIUM CHANNEL BLOCKERS** - CALCIUM CHLORIDE 10 mg/kg IVP/IO (MAX 1 gram)
- TENSION PNEUMOTHORAX** – NEEDLE THORACOSTOMY (CHEST DECOMPRESSION)