

# DROWNING/SUBMERSION INJURIES

Cardiac arrest in drowning is caused by hypoxia, airway and ventilation are equally important to high-quality CPR.

# I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Submersion in water regardless of depth.
- ALOC with submersion
- Respiratory distress with foaming, vomiting, coughing, wheezing, abnormal lung sounds and or apnea.
- Decreased or absent vital signs.

# II. PRIORITIES

- Assure the safety of EMS field personnel.
- Assure and maintain ABCs with an emphasis on reversing hypoxia.
- Ventilate through the foam, do not waste time attempting to suction.
- Consider trauma or pre-existing medical problem (hypoglycemia, seizure, dysrhythmia).
- Assess for hypothermia.
- Encourage transport even if symptoms are mild.

# III. BLS INTERVENTIONS

- Assure and maintain ABCs.
- Administer oxygen per ICEMA Reference #11010 Medication Standard Orders.
- Maintain spinal motion restriction if indicated.
- Remove wet clothing/ warm patient.
- Obtain and monitor vital signs.
- Provide high quality CPR if indicated with an emphasis on airway.

# IV. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Obtain vascular access at a TKO rate or if signs of inadequate tissue perfusion, administer 500 cc fluid challenge and repeat until perfusion improves.

- For pediatric patients with signs of inadequate tissue perfusion, administer 20 ml/kg IV and repeat until perfusion improves.
- Administer Albuterol per ICEMA Reference #11010-Medication-Standing Orders

### V. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Monitor cardiac status.
- Monitor end tidal CO2, pulse oximetry
- Obtain glucose level. If indicated administer:
  - > Dextrose per ICEMA Reference #11010-Medication-Standing Orders.
  - May repeat blood glucose level. Repeat Dextrose Per ICEMA Reference # 11010-Medication- Standing Orders.
- Administer Albuterol/Atrovent per ICEMA Reference #11010 Medication Standard Orders.
- Consider an advanced airway, refer to ICEMA Reference # 11020 Procedure Standard Orders.

### VI. REFERENCES

<u>Number</u>	<u>Name</u>
11010	Medication - Standard Orders
11020	Procedure- Standing Orders
14050	Cardiac Arrest-Adult
14150	Cardiac Arrest-Pediatric