
05-0605 – Submersion Injuries

AUTHORITY:

Health and Safety Code Division 2.5, California Code of Regulations, Title 22, Division 9

DEFINITION:

Anoxic injury and/or death can occur from asphyxia due to submersion.

BLS TREATMENT:

1. Consider spinal precautions prior to extrication if possibility of neck/spine trauma.
2. Rapid extrication of the victim from water; to be performed by a trained rescuer with appropriate equipment if needed.
3. Keep patient on their side/recovery position to protect the airway and prevent aspiration.
 - a. Be aware of potential/associated injuries prior to placing the patient on their side.
4. Have suction ready and available.
5. OXYGEN: Use high flow NRB (FiO₂ 100%) and assist ventilations as necessary.
6. Consider CPAP.
7. Use advanced airway adjunct to the limit of the providers scope as needed.
8. VITALS: assess vitals frequently, if the patient is in shock then every 5 minutes.
9. BLOOD SUGAR CHECK: test blood sugar treat as appropriate.
10. CHECK TEMPERATURE: assess temperature and keep the patients warm.
 - a. Suspect hypothermia:
 - b. Keep patient warm.
 - c. Remove wet clothing and prevent further heat loss.
 - d. Refer to Hypothermia protocol [#05-0604 Adult Hypothermia](#). Transport these hypothermic patients to the nearest appropriate facility.
11. Consider associated trauma in evaluating these patients.
12. Hemorrhage: treat with appropriate devices such as tourniquet and hemostatic agents.
13. Give nothing by mouth.

ALS TREATMENT:

1. Advanced airway or rescue airway as indicated with spinal precautions if needed.
2. Cardiac monitor: treat arrhythmia with appropriate cardiac protocols.
 - a. If patient is in Ventricular Fibrillation rapid rewarming is needed if the patient is hypothermic.
 - b. Patients who are hypothermic may not respond to standard treatment.
3. Establish IV/IO access. Administer fluids to maintain systolic blood pressure to 90 mm Hg or greater see shock protocol [#05-0416 Adult Shock](#).
4. If wheezes are present: Albuterol via HHN as needed, may repeat as needed up to a maximum of (6) unit dose vials, then per base hospital physician order.
5. Consider anti-emetics per policy.
 - a. See Nausea/Vomiting protocol [#04-0423 Adult Pediatric Nausea and Vomiting](#).
 - b. See Nausea/Vomiting protocol [#04-0818 Nausea and Vomiting Peds](#).