

## A. Introduction

“**Drowning** is the process of experiencing respiratory impairment from submersion / immersion in liquid” The word *Drowning*, should be used to refer to a person who drowned (death) or to a person who was rescued (fatal drowning or non-fatal drowning.)

**Water Rescue** is the process of removing someone from the water in which dangerous conditions are present but the victim shows no signs of respiratory impairment.

### *General Care*

1. Initial assessment/Care (**Protocol 1**).
2. Administer **15 L/min Oxygen** via NRB mask.
3. Maintain normal body temperature to protect against hypothermia.

## B. Drowning / Water Rescue Incidents

### EMR/BLS

1. Consider concurrent trauma and manage accordingly. (**Protocol 21**).
2. Consider insertion of I-gel with NG Tube (Lifeguards only) (**Procedure 49**) (**Procedure 12**).
3. Determine important history from the patient or bystanders which includes:
  - a) Duration of submersion
  - b) Water temperature
  - c) Any possibility of seizure activity
  - d) Any associated drug or alcohol use
  - e) How the patient entered the water

### ALS

3. Consider insertion of an NG/OG (**Procedure 12**).
4. Treat dysrhythmias per specific protocols. Consider hypoxia as a primary cause of the dysrhythmias.
5. All non-fatal drowning victims must be transported to the closest appropriate hospital for evaluation, regardless of how well they may seem to have recovered. Delayed death or complications due to pulmonary edema or aspiration pneumonia are common.

## C. Decompression Sickness/Air Embolism

### EMR/BLS

1. Evaluate for specific signs and symptoms:
  - a) Pain (primarily joint pain)
  - b) Altered level of consciousness
  - c) Generalized numbness or confusion
  - d) Weakness or paralysis
  - e) External or diagnosed internal bleeding
  - f) Extreme vertigo
2. If this is a SCUBA diving accident, obtain a history from the patient or bystanders to include:
  - a) Was the victim breathing compressed air or other gas mixtures (Heliox, nitrox, etc.)?
  - b) Elapsed time (bottom time) of the dive.
  - c) Maximum depth of the dive.
  - d) Were multiple (repetitive) dives made? Note depths and times.
  - e) Time since ascent.
  - f) Has the patient been at a high altitude 1,000 feet or greater (depressurized aircraft) since the dive?
  - g) If possible, obtain the tanks used or air (gas) for analysis.
  - h) Was any dangerous marine life noted by victim or other divers that may have caused a rapid ascending?
  - i) Any sudden onset of a medical condition that may have caused a rapid ascending?

### ALS

4. Manage patient according to the appropriate protocol(s).
5. Transport to the most appropriate facility as per the Hospital Capability Chart, i.e. an approved Hyperbaric Chamber (**Appendix 2**).