INTRODUCTION

First Aid, in any situation, consists of emergency treatment of the sick or injured before medical help can be obtained. Measures taken should not supercede or replace proper medical and surgical attention and should consist of furnishing temporary assistance.

ENABLING OBJECTIVES:

2.1 Respond to an emergency per current American Red Cross standards.

2.2 Administer CPR per current American Red Cross standards.

2.3 Administer Standard First Aid per NAVEDTRA 12081 standards.

2.4 Administer Practical First Aid in a mock trauma (moulage) scenario.

TOPIC OUTLINE

A. Purpose of First Aid for Rescue Swimmers

1. Save life.

2. Prevent further injury.

3. Preserve resistance and vitality.

4. Basic principles which further the purposes of First Aid:

   a. Act quickly, but effectively.

   b. Reassure the survivor in a calm manner.

   c. Reveal only enough of the survivor's injuries to the survivor to insure cooperation.

   d. Don't talk to others of the survivor's injuries while the survivor is in hearing range.

   e. If survivor is in danger of further injury, remove from danger quickly and smoothly.
B. Basic Order of Treatment

1. If the survivor is in the water and not breathing, give two full breaths. If physically able, do not interrupt artificial ventilation until the survivor is in the rescue platform.

2. If survivor is unconscious or has ejected, always treat as a possible head, neck and/or back injury. The spine shall be stabilized prior to moving the survivor whenever circumstances permit.

NOTE
As a SAR swimmer, your primary objective is to get the survivor into the rescue platform before attempting any advanced first aid.

3. Advanced first aid begins once the survivor is in the rescue vehicle.
   a. Conduct primary survey
      (1) Establish a working airway, breathing and circulation.
      (2) Stop severe hemorrhage
      (3) Place cervical collar on the survivor if spinal injury is suspected
   b. Conduct secondary survey

C. Hemorrhage Control

1. Hemorrhage Control is performed by the following five methods:
   a. Direct pressure
   b. Elevation
   c. Bandage
d. Pressure Points

e. Tourniquet

**WARNING**
When practicing on a simulated survivor, do not tighten tourniquet.

2. Applying a tourniquet

a. When you use a tourniquet you risk sacrifice of a limb in order to save a life.

b. Tourniquets are only placed on the extremities (arms and legs). They are normally placed 1 to 1.5 inches above the wound.

c. Write down time and location of tourniquet, place on front of survivor's shirt.

d. Write a capital "T" on the survivor's forehead.

e. Leave tourniquet visible.

f. Never use string or wire or thin material. Use a ready made or improvised material at least one inch wide.

g. Tighten only enough to stop the bleeding.

h. Never loosen unless advised by a physician.

D. Secondary Survey

1. During the secondary survey, examine the survivor from head to toe and treat for further injuries that are found.

a. Remove only enough of the survivor's clothing to ensure a thorough survey, yet not chill the victim.
b. Rip or cut clothes along a seam to expose injury.

2. The treatment of secondary injuries and illness is a combination of first aid and common sense.
   a. The basic order of treatment can vary depending on the situation and injuries.
   b. If the survivor is having trouble breathing, place the survivor in a comfortable position (semi-seated) which allows treatment and does not worsen his injuries. If this position will make the injuries worse, and the survivor can breathe okay until treated, treat injuries first.

   **NOTE**
   Place in semi-seated position only if neck and back injuries are not expected.

3. Facial/Scalp Wounds
   a. Ensure that the tongue, injured soft tissue, or other material, does not block the airway causing a breathing obstruction.
   b. Position the survivor so that blood will drain out of the mouth and nose.
   c. Remember that facial wounds, as well as scalp wounds, bleed freely. Do not let that scare you and keep you from properly treating the survivor.

4. Open (Compound) Fracture
   a. An open fracture is a broken bone with an open wound.
   b. Treat the wound first. Most bleeding can be stopped by applying direct pressure on the wound or by applying digital pressure at the appropriate pressure point.
   c. Dress the wound.
   d. Do not attempt to set a broken bone.
5. Once the survivor is aboard the rescue platform, the medical equipment available to
the rescue swimmer is the Level "A" medical kit. Nomenclature and quantity is
described in the NWP 3.50-1 manual.

6. Keep rescue vehicle commander informed of survivors condition to include the
following pertinent information:
   a. Age
   b. Sex
   c. Blood type/Allergies/Medications (if known)
   d. State all injuries

E. Treating Shock

1. Most survivors will be in shock.

   **WARNING**
   In a rescue situation from a water environment, the survivor may
   be placed in a litter and hoisted horizontally to prevent the effects
   of hydrostatic squeeze.

2. Hydrostatic Squeeze
   a. Caused by the relief of outside water pressure against the body.
   b. Removal from the water has similar effect as shock or near shock, and causes a
      pooling of blood in the extremities increasing shock.

3. Position survivor for transport in the rescue vehicle in one of the following five
   positions.
   a. Traditional Shock Position -
Feet are elevated above the level of the heart. Use this position unless the survivor's injuries indicate the use of another position.

b. Flat on Their Back Position -

Use when serious head injuries or spinal injury is suspected. Position the survivor on their back, keeping the body as straight as possible. Maintain inline stabilization for the head and neck.

c. Semi-Sitting Position -

Used for survivor with difficulty breathing, or with superficial head, neck, or chest injuries. Not to be used if you suspect head, neck or spinal injuries.

d. Knee's Flexed Position -

Used for survivor with abdominal injuries. Lie survivor on their back and raise their knees to approximately 45 degrees. This will ease tension on the abdominal muscles.

e. Side Position -

Used for survivor with nausea and vomiting, bleeding from mouth, large amounts of oral secretions or an open (sucking) chest wound, survivor is placed on the injured side.

F. Underwater Injuries

1. May occur anytime a survivor breathes compressed gases underwater.
   b. Seat Pan Oxygen.
   c. Self-Contained Underwater Breathing Apparatus (SCUBA).

2. Two life threatening conditions may occur.
   a. Air embolus.
b. Decompression sickness (the BENDS).

3. Signs and Symptoms
   a. Air Embolus
      (1) Dizziness
      (2) Blurred vision
      (3) Chest pain
      (4) Disorientation
      (5) Personality change
      (6) Paralysis or weakness
      (7) Bloody froth from mouth or nose
      (8) Convulsions
   b. Decompression Sickness (BENDS)
      (1) Unusual fatigue or weakness
      (2) Skin itch
      (3) Pain in the arms, legs, or torso
      (4) Dizziness
      (5) Coughing
      (6) Shortness of breath
      (7) Numbness, tingling or paralysis
4. Treatment
   a. Both air embolus and decompression sickness require urgent recompression.
   b. Administer CPR if required.
   c. Keep airway open. Survivor may vomit.
   d. Keep survivor lying down (left side down) and quiet. Embolism bubble will rise away from heart in this position.

5. Transportation
   a. Unpressurized aircraft fly at lowest safe altitude and limit altitude changes.
   b. Ensure rescue vehicle commander contacts hyperbaric chamber before arrival of survivor.
   c. Keep rescue vehicle commander informed of survivors condition.