Scene Safety Assessment

S  Stop.
A  Assess the scene.
F  Find oxygen unit, first aid kit and AED, and take to injured person.
E  Exposure protection.

Initial Assessment

- Assess responsiveness and normal breathing.
  - Tap the individual's collar bone and loudly ask, “Are you OK?”
  - State your name and desire to help.
- If the individual responds, have him remain in the position found.
- If the person is unresponsive but breathing normally, place him in the recovery position.
- If the person is not breathing normally, begin CPR.
  - Shout for help, or send someone to call EMS.

CPR (Do not delay CPR to wait on an AED or other equipment.)

- Deliver 30 compressions followed by 2 ventilations.
- Continue CPR cycles of 30:2.
- Deploy AED if available.

Shock Management

- Place person on his back or in position of comfort.
- Consider elevating legs 6-12 inches (15-30 cm) if no neck, spine, or pelvic injuries
- Maintain normal body temperature.
- Monitor continuously.
- Do not give fluids.

Spiny Envenomations (lionfish, stonefish, stingrays, seastars/urchins, crown-of-thorns)

Signs and Symptoms

- Puncture or laceration
- Pain (intense, sharp, stinging)
- Protruding spines and/or tissue damage
- Local swelling
- Blisters
- Purple or black skin discoloration (possibly)
- Nausea and vomiting
- Shock (rare)
- Respiratory arrest (rare)
- Cardiac arrest (rare)

First Aid

1. Thoroughly wash area.
2. Remove foreign material with tweezers. (Leave stingray spines in place for removal at medical facility.)
3. Control any bleeding.
4. Manage pain by immersing in nonscalding fresh water (112°F/45°C maximum) for 30-90 minutes. (Cold packs may also be used.)
5. Leave blisters intact.
6. Apply topical antibiotic ointment.
7. Monitor responsiveness.
8. Seek medical evaluation.
9. Use antivenin for stonefish, if indicated.
10. Monitor for allergic reaction and/or infection.
Stings (jellyfish, fire coral, anemones, hydroids)

Signs and Symptoms
Symptoms may progress rapidly.
• Pain (can be extreme, possibly with breathing)
• Muscle cramps (may be severe)
• Welts
• Burning and itching
• Localized redness and swelling
• Blisters (may be delayed forming)
• Nausea, fatigue, general malaise
• Shock (rare)

First Aid
Activate emergency medical services immediately if symptoms progress.
1. Inactivate: Irrigate with generous amounts of a mild vinegar solution.
2. Remove tentacles with tweezers. Wear gloves.
3. Wash/irrigate with seawater or sterile saline. Avoid rubbing or use of fresh water.
4. Symptomatic Treatment:
   • Pain relief (hot or cold packs); pain medications, anti-inflammatory agents, topical anesthetic agents
5. Monitor for allergic reaction and/or infection.

Contact Injuries (sponges, corals, bristle worms)

Signs and Symptoms
• Sharp, stinging pain
• Burning sensation, numbness
• Localized redness
• Blisters
• Mild to severe itching
• Bleeding associated with cuts/scrapes
• Swelling

First Aid
1. Wash with soap and water. 3. Control any bleeding.
2. Remove foreign material. 4. Leave blisters intact.
   a. Cellophane tape may help with bristle removal.
   b. Irrigate to dislodge debris.
5. Eye contact — flush with fresh water; seek medical attention.
6. Monitor for infection.

Pressure Immobilization Technique
(blue-ring octopus, sea snakes and cone shells)

Signs and Symptoms
2. Wash with soap and water. 7. Splint affected extremity.
3. Remove foreign material if present. 8. Use a sling when the wound is on the hand or arm.
4. Apply dressing over bite. 9. Do not remove until at a medical facility.
5. Apply elastic bandage snugly but not excessively tight over the site.
   — Wrap at least 6 inches/15 cm on either side of the wound if possible.
10. Transport immediately.
First Aid for Hazardous Marine Life Injuries

Traumatic Injuries (control of external bleeding)

Signs and Symptoms
- Bites (teeth in wound)
- Severe scrapes

First Aid
1. Wash with soap and water.
2. Control bleeding with direct pressure.
3. Apply dressing and bandage.
4. Seek medical evaluation.
5. Monitor for signs of infection.

Applying a Tourniquet

If bleeding is profuse and uncontrolled by direct pressure
- Apply 1-2 inches (2.5-5 cm) above the wound
- Place windlass over bleeding artery
- Turn windlass until bleeding stops and secure in place
- Note “T” or “TK” on injured person’s forehead
- Continue to monitor and provide verbal support

Life-Threatening Complications

Signs and Symptoms
- Anaphylactic shock (swelling, itching, airway narrowing, respiratory distress)
- Cardiogenic shock (pale, clammy skin; severe shortness of breath; weak pulse)
- Hypovolemic shock (pale, clammy skin; confusion; weakness; rapid breathing)

First Aid
All are MEDICAL EMERGENCIES. Alert local emergency medical services immediately.
1. Anaphylaxis: Assist with any prescribed allergy medications.
2. Cardiogenic: Have individual lay on back or in a position of comfort; monitor responsiveness.
3. Hypovolemic: Control any bleeding; lay individual on back or in position of comfort; monitor responsiveness.

Seashell Poisoning

Symptoms may progress rapidly with tetrodotoxin (TTX) poisoning. Activate emergency medical services immediately if neurological symptoms appear.

Signs and Symptoms
- Abdominal pain, gastroenteritis
- Itching
- Nausea, vomiting
- Lack of muscle coordination
- Diarrhea
- Paralysis
- Numbness, tingling
- Reversal of hot and cold perception

First Aid
1. Monitor responsiveness.
2. Contact the local poison control center. Save fish or vomitus for analysis if available.
3. Seek evaluation from a medical professional when seafood poisoning is suspected.