FIRST AID

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USCG Auxiliary
Flotilla 014-01-02
Lesson Objectives

- State Auxiliary policy for rendering first aid while on patrol
- State the symptoms and treatment for the following conditions:
  - Sun and heat related factors
  - Shock
  - Bleeding
  - Burns
  - Hypothermia
What is First Aid?

Immediate care that you give someone with an illness or injury before trained help arrives and takes over.

Early action in an emergency can be critical and can help a victim recover more completely.

May mean the difference between life and death.
First aid training is not part of the Auxiliary boat crew qualification process

Auxiliarist’s may only provide first aid that they are trained to give and which is within the scope of their assigned duties

Auxiliarist’s are encouraged to develop personal first aid qualifications
Good Samaritan Law

- Act in good faith
- Act as a prudent person
- Be neither reckless nor negligent
- Provide care in scope of your training
- Accept no reimbursement
- Do not abandon victim
Victim and Rescuer Safety

“Dead heroes can’t save lives. Injured heroes are a nuisance. So check the scene for hazards before you lurch in.”
General Considerations

- Are you trained?
- Are you equipped?
- If “no”
  - Notify station
    - Observations
    - Activate appropriate resources
  - Secure area
  - Do not become involved
  - Do not become a victim
Communication

- Call the Coast Guard station
  - Provide information
  - Receive advice for care
- Activate appropriate resources
  - Call 911
  - Arrange to transport victim to better care
Basic First Aid Kit

Adhesive bandage compress
   Plastic strips (various sizes)
Bandage compress 2 in.
Bandage compress 4 in.
Triangular bandage
Absorbent gauze compresses
Gauze roller bandage 4 in.
Aluminum splint or SAM® splint
Tourniquet
Eye dressing packet (pads and strips)
Eye wash solution

Antiseptic swabs
Adhesive tape 1 in.
Antibiotic ointment
Gloves, disposable (vinyl or nitrile)
Bandage scissors
Non-adherent pads 2 in. X 3 in.
Tweezers
Sunscreen (SPF 30 or higher)
Burn treatment compound
Aspirin 324 mg.
CPR breathing barrier
Ammonium inhalants
First Aid book
Bleeding
Types Of Bleeding

- **Capillary bleeding**
  - Cuts and scrapes ooze blood
  - Clean with warm water & soap
  - Dress with bandage to prevent infection

- **Venous bleeding**
  - Deep cut that opens veins
  - Potentially life threatening
  - Must be controlled

- **Arterial bleeding** – *Life Threatening*
  - Spurting blood
Bleeding
2006 AHA/ARC Guideline

- Direct pressure firmly over the bleeding area until bleeding stops.
- Manual pressure with gauze or other cloth placed over the bleeding site
- Add more gauze and more pressure if bleeding continues
- Use elastic bandage firmly wrapped over gauze to hold it in place with pressure.
- No recommendation for use of pressure points or tourniquet by the lay rescuer
Bleeding Control

- **Direct pressure**
  - Place sterile dressing over wound
  - Wrap roller gauze around wound
  - Tie knot directly over wound
  - Check for pulse below wound
  - Do not remove dressing if bleeding continues
    - Apply additional dressing over original

- **Elevate**
  - Above heart if able
  - Do no further harm

- **Pressure points**
Bleeding
Direct Pressure
Bleeding Pressure Points

Apply pressure where artery lies near skin over bone.
Bleeding Pressure Points

- Use pressure point closest to wound, between wound and heart
- Superficial arteries: use flat surface of several fingers
- Femoral artery, use heel of one hand
Bleeding Tourniquet

- Use only if bleeding uncontrolled
- Use wide device
- Place two inches above wound
- Use enough pressure to stop bleeding
- Do not remove until directed to by competent medical resources
- Place letter T on forehead and time applied
Bleeding Tourniquet
Shock
**Shock**

- **Physiologic (medical)**
  - Body’s circulatory system fails to deliver adequate blood supply to all parts of the body

- **Psychologic**
  - Acute reaction to stress
  - Intense emotional reaction
Shock Signs

- State of consciousness: alert (may be deceiving) to unconscious
- Breathing: shallow, rapid, irregular
- Pulse: weak and rapid
- Skin: cold, clammy (sweating)
- Eyes: pupils dilated
Signs of Shock

- Anxiety, restlessness, irritability
- Altered consciousness
- Rapid pulse or breathing
- Pale, cool, moist skin
- Dazed look
- Weak, helpless feeling
- Thirst
- Nausea
Shock Treatment

- Obtain history
  - What happened
  - Medical problems
  - Medications
  - Check for Medic Alert® or other information tags
- Notify station
- Provide oxygen and specific treatment if advised, trained, and willing
Shock

Treatment (cont.)

Position flat on back, feet raised (if no head, neck, or spine injury suspected or heart attack)

CPR (if indicated and trained)

Warm – cover with blanket (if patient not hot)

Nothing by mouth – may moisten lips

Never give alcohol
Care for Shock

- Keep victim lying down
- Try to make comfortable
- Reassure and comfort to relieve anxiety
- Control external bleeding
- Elevate legs 10-12 inches, unless spinal injury or broken bones
- Maintain body temperature
- Nothing to eat or drink
- Place on side if nauseous or vomiting
- Call for EMS
Types of Burns

1\textsuperscript{st} degree/superficial
- Skin surface red and dry
- Painful

2\textsuperscript{nd} degree/partial thickness
- Skin red and will have blisters
- Painful

3\textsuperscript{rd} degree/full thickness
- All layers and underlying structure
- May be painless
Burns

First Degree

- Only outer layer of skin
- Mild pain
- Redness
- Warmth
- Tenderness
Burns
Second Degree

- Inner layer of skin
- Redness
- Warmth
- Tenderness
- Blister
- Severe pain
Burns
Third Degree

- Tissue is destroyed
- Charred (white to black)
- May lack feeling
First Aid for Thermal Burns

- Cool burned area
  - Immerse in cold water or apply cold cloths
  - **Do not** apply water to 3rd degree burn
    - Unless very small area
    - Hypothermia may result if area large
    - Call ems for all 3rd degree burns
- Cover with clean **dry** dressing
- Elevate burned limb above heart
- Treat for shock if necessary
Other Burns

Electrical

- May severely damage tissue
- May cause 2 wounds
- Entrance & exit

First aid

- Turn off power source
- Check for breathing and circulation
- Do not move victim unless necessary
- Cover burn with sterile dressing
- EMS
Other Burns

Chemical
- Chlorine, battery acid, etc
- Require immediate care

First aid care for chemicals
- Wash away chemical with gently flowing water for at least 20 min
- Remove contaminated clothing/jewelry during flushing
- Brush away dry chemical
- Contact ems/poison control
- Monitor victim for delayed reaction
- Rinse contaminated eye downward so fluid flows away for other eye
Do’s & Don’ts for Burn Care

Do

- Monitor for changes in breathing and consciousness
- Keep victim from getting chilled or overheated
- Seek appropriate medical care

Don’t

- Apply home remedies or ointments
- Apply ice directly to skin
- Break blisters
- Remove clothing stuck to burn
- Apply moist dressing to 3$^{rd}$ degree burn
Anaphylactic Shock
Severe Allergic Reactions

**Causes**
- Insect bite or sting
- Ingested, inhaled, injected or absorbed substance

**Signs and symptoms**
- Skin rash, hives, itching or burning
- Tightness in chest or throat
- Noisy/difficult breathing
- Swelling of face, neck, lips and/or tongue
- Nausea, confusion, dizziness
- Fainting, coma
First Aid for Severe Allergic Reactions

- True medical emergency
- Call EMS
- Provide prescribed medication
  - Epinephrine auto injector if available
- Monitor breathing and circulation
- Life support care if necessary
EpiPen®

1. Familiarize yourself with the unit
2. Grasp unit with black tip pointed downward
3. Form a fist around auto-injector, black tip downward
4. With your other hand, pull off the gray activation cap
5. Hold black tip near outer thigh
6. Swing and jab firmly at 90° angle into outer thigh
7. Hold **firmly in thigh** for 10 seconds
8. Remove unit and massage injection area for several seconds

9. Check black tip:
   - If needle is exposed you received the dose
   - If not, repeat steps #5-8

10. Bend the needle back against a hard surface

11. Carefully put the unit (needle first) back into the carrying tube (without the gray activation cap)

12. Recap the carrying tube
13. Immediately after use

- **Call 911** and activate emergency medical services
- If EMS not available, go immediately to the nearest hospital emergency room
- Tell the physician that you have received an injection of epinephrine
- Give your used EpiPen® to the physician for inspection and proper disposal
Sun and Heat Related Illnesses
Dehydration can occur insidiously
Before you leave drink 2-3 glasses of fluid
Maintain hydration 4-8 ounces every 30-60 minutes.
Do not drink caffeinated beverages
Do not drink alcoholic beverages
Shade and head cover
Heat and Dehydration

If a person is not perspiring and is feeling hot, the person may not be adapting to the heat.

- Cool down immediately
- Seek medical care immediately
Heat Related Emergencies

- Minor heat illness left uncared for will develop into a major heat illness.
- Important to recognize and treat symptoms of heat illness early to prevent progression to heat stroke.
- First need to cool victim down.
Heat Rash

- Prickly heat
- Sweat gland dysfunction
  - Pores obstructed
- May not be perspiring
- May feel warm
Heat Cramps
(Early Dehydration)

Heat cramps
- Painful muscle cramps
- Moist, cool skin
- Heavy sweating

Treatment of heat cramps
- Move to cool place
- Give water or salt solution
- Massage cramped muscle
## Heat Exhaustion (Dehydration)

<table>
<thead>
<tr>
<th>Signs</th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>Cold &amp; clammy</td>
<td>Move to cool place</td>
</tr>
<tr>
<td>Heavy sweating</td>
<td>Elevate legs</td>
</tr>
<tr>
<td>Weak pulse</td>
<td>Remove sweat soaked cloths</td>
</tr>
<tr>
<td>Shallow breathing</td>
<td>Apply cool packs</td>
</tr>
<tr>
<td>Nausea/cramps</td>
<td>Give water</td>
</tr>
<tr>
<td>Weakness/fatigue</td>
<td>Monitor</td>
</tr>
<tr>
<td>Headache</td>
<td></td>
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Heat Stroke
(Hyperthermia)

- **Signs**
  - Hot, dry, red skin
  - Confusion or unconsciousness
  - Little or no sweating
  - Full, rapid pulse

- **Action**
  - Life threatening
  - Call ems
  - Move to cool place
  - Cool victim with fanning and cool packs
  - Remove excess clothing
Heat and Dehydration Treatment

- Notify Coast Guard
- Remove to cooler area out of the sun
- Treat for shock
- Remove clothing
- Ventilate
- If fully conscious, sips of water
- If hot, apply cool water and fan
- Always obtain medical care
Hypothermia
Cold Related Emergencies

- **Frostbite**
  - White, waxy skin
  - May feel frozen

- **Frozen**
  - Hard skin
  - Blotchy white to yellow-grey or blue-grey

- Remove victim from cold
- Transport to medical facility
- Rewarm part with warm water if so advised by medical authority
- Bandage & pad between digits
Mild Hypothermia

**Signs**
- Shivering
- SLURRED SPEECH (as intoxicated) STUMBLING OR STAGGERING
- Usually conscious
- Clouded mental capacity
- Breathing: slow and labored
- Pulse: weak, slow, irregular or absent
- Skin: cold
- Muscular rigidity
- Pupils: dilated

**Treatment**
- Remove from cold
- Replace wet clothing with dry
- Insulate victim
- Seek medical attention
# Severe Hypothermia

<table>
<thead>
<tr>
<th>Signs</th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>Body core temp below 90 f</td>
<td>Call EMS</td>
</tr>
<tr>
<td>Shivering stopped</td>
<td>Keep from getting colder</td>
</tr>
<tr>
<td>Muscles stiff</td>
<td>Rewarming in field not recommended</td>
</tr>
<tr>
<td>Bluish tint</td>
<td>Treat victim as though he might break</td>
</tr>
<tr>
<td>Not reactive to pain</td>
<td>Do thorough pulse check before CPR</td>
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<tr>
<td>Slow pulse and breathing</td>
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<tr>
<td>Dilated pupils</td>
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<tr>
<td>May appear dead</td>
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</table>
You may be the first part of an emergency response required to save a life.
Your early care may mean the difference between a lifelong and temporary disability.
Recognition of an emergency, rapid EMS activation and appropriate first aid will help ensure the well-being of those needing your assistance.