

# Standard First Aid/AED Review ECC Guidelines 2010



State of Connecticut  
Department of Mental Health and Addiction Services  
Division of Safety Services,  
Safety Education and Training Unit  
**August 2014 Update**

## Environmental Emergencies

HEAT	Level / Signals	Care Provided
	<p><b>Heat Cramps</b></p> <p>Symptoms include: painful muscle spasms, usually in the legs and abdomen</p>	Cool victim, give water to drink, gently massage muscle and stretch to relieve spasm.
	<p><b>Heat Exhaustion</b></p> <p>Symptoms include: cool moist skin, sweating headache, dizzy, nausea, weakness, and exhaustion.</p>	Cool victim, circulate air around victim, give water if conscious, monitor, if victim does not improve, call 911.
	<p><b>Heat Stroke</b></p> <p>Symptoms include: Red–dry skin, trouble breathing, rapid breathing or pulse, confusion or change in level of consciousness. Can be life threatening if not treated.</p>	<p>Call 911, **cool victim, circulate air, loosen clothing, monitor breathing &amp; pulse. If conscious, provide small amount of cool water to drink. IF AVAILABLE PROVIDE CARBOHYDRATE-ELECTROLYTE DRINK.</p> <p><b>** *Rapidly cool by immersing the victim in cold water or bags of ice/ ice water-doused towels.</b></p>
COLD	Level / Signals	Care Provided
	<p><b>Hypothermia</b></p> <p>Symptoms include: shivering, slow breathing, slow pulse, glassy stare, confusion, in late stages–no shivering and loss of consciousness.</p>	Move the victim to a warm place, monitor breathing–pulse and for signs of shock, remove wet clothing, wrap in warm clothes or blankets, provide care as needed.
	<p><b>Frostbite</b></p> <p>Symptoms include: numbness, pins and needles (especially in feet, face or hands), waxy appearance to skin, and severe frostbite (might include blisters to the skin, blue tint to skin).</p>	<p>Remove wet clothing and jewelry:</p> <p>Minor conditions–SKIN TO SKIN CONTACT: I.E. HOLD AFFECTED AREA BETWEEN YOUR HANDS.</p> <p>Large body areas or severe cases i.e. blisters; gradually warm the skin in warm water, cover with dry-sterile dressings, monitor breathing, pulse, and for shock. Provide care as needed.</p>
BITES		
	<b>Venomous Snake Bite</b>	Apply pressure immobilization bandage
	<b>Animal or Human Bite</b>	Clean with large amounts of water or saline solution

This SFA/AED booklet is intended exclusively for use by DMHAS employees during attendance at the SFA/AED training classes that are taught by American Red Cross certified Division of Safety Services Instructors.

DMHAS employees may use it as a reference tool but because it is not all inclusive of all of the content and techniques that are taught during a SFA/AED class, it should not be used exclusively to address questions related to it's content.

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## My Goals for Improvement

1. Please take a moment to think about what your strengths and weaknesses might be in these areas:
  - **Checking the Conscious & Unconscious Victim**
  - **Conscious Choking**
  - **1 & 2 Person Adult CPR**
  - **Bag-Valve-Mask**
  - **Using the AED**
  - **Controlling Bleeding**
  
2. I feel I am very good at \_\_\_\_\_
  
3. I feel that I need more practice on \_\_\_\_\_  
 (*Now take some time to set a specific realistic goal*)
  
4. By the end of this training I would like to be able to \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### After Completing Class:

5. Did you reach the goal that you set? \_\_\_\_\_
  
6. How do you know? (Be specific with your answer) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Sudden Illness

When people become suddenly ill they have common symptoms. They appear confused, dizzy, disoriented, may have trouble breathing, become pale or may sweat. We may know they are diabetic or have a seizure disorder. However we may not know the cause of the sudden illness but we can help.

**The steps to take to help in sudden illness all begin with call 911, for a conscious victim-get permission to help, put on gloves to prevent disease transmission, monitor for breathing and signs of life and keep the victim comfortable.**

**Listed below are 4 specific sudden illnesses, included are the symptoms and First Aid care.**

Sudden Illness	Care Provided
<b>Stroke</b> Think Face-Arms-Speech-Time ( <b>FAST</b> ) Ask the person to say a simple sentence and smile: note slurred speech or any drooping of mouth or eye, ask to raise arms: note difficulties, complaints of headache. <u>Stroke is caused by a sudden blockage of blood flow to the brain.</u>	Call 911 Keep the victim comfortable and do not give anything to drink or eat.
<b>Seizure</b> Symptoms include: convulsions, body stiffening, a blank stare, upward rolling of the eyes, when conscious - headache or tired.	Cushion head with pillow or clothing. Move any objects away and loosen clothing from neck and waist. Know conditions to call 911.
<b>Diabetic Emergency</b> Symptoms include: feeling weak, confused, trouble breathing, sweating, and loss of consciousness. <u>Diabetic Emergency results from too much or little sugar in the blood.</u>	If conscious, give something to eat or drink w/ sugar. Know conditions to call 911.
<b>Poisoning/Allergic Reaction</b> Symptoms include: pain, coughing, abnormal pulse rate, sweating, and nausea.	Move the victim away from source of poisoning. Call 911 or poison control center (1-800-222-1222). Do not induce vomiting unless directed.

## Bone and Muscle Injuries

General care for injuries to muscles and joints include minimizing movement of the injured area & Rest, Immobilize, Cold, Elevate (RICE). Whenever you suspect an injury to a bone, joint or muscle you should treat the injury like a broken bone.

Check the scene and victim.

If the victim is unable to move a body part, or a life-threatening condition is present, then call 911.

**Fractures** – are a complete break, chip or crack in a bone

**Open Fracture** – An open wound in which the bone has torn through the skin

**Closed Fracture** – The skin is not broken

**Dislocation** – Is the movement of a bone at a joint away from its normal position

**Sprain** – Is the tearing of ligaments at a joint

**Strain** – Is a stretching and tearing of muscles or tendons

### Steps to Apply a Sling

Apply a splint if you must move the victim and it causes no pain.

- Support the injured body part above and below the injured area
- Check for circulation (feeling, warmth and skin color below the injury).
- Tie a slip knot to the short point of a triangular bandage.
- Place the knot behind the elbow and spread the triangular bandage under the injured area (arm for example) and over the uninjured shoulder. Minimize movement of the injured area.
- Bring the sling over the front of the injured arm and tie a knot at side the neck away from the injury. The hand should be higher than the elbow.
- Secure the arm to the chest with a folded bandage and leave the uninjured arm free.
- Re-check for circulation (feeling, warmth and skin color below the injury).

### Steps for anatomic splint

- Check for circulation (feeling, warmth, and color).
- Bind a leg to a leg: using triangle bandage, weave under ankles & knees...tie one leg to the other at the ankles, above & below the knees.
- Recheck for circulation (feeling, warmth, and color).

## Standard First Aid w/ AED Review Booklet ECC Guidelines 2010

### Things to remember:

- For all victims one person CPR cycle is 30 compressions to 2 breaths.
- Two person CPR for adult cycle is 30 compressions to 2 breaths.
- Adult is a victim 12yrs. or older for all rescue techniques.
- AED continues to be used on a victim 8 years or older and over 55 pounds.
- No pulse check or rescue breathing technique for the adult victim.
- Cardiac Chain of Survival: Early Recognition, Access to 911, Early CPR, Defibrillation and Advanced Medical Care.
- Always take precautions against disease transmission, wash hands after glove removal.
- The Good Samaritan Laws protect people who give care without accepting anything in return.

### Before Giving Care & Checking an Injured or ILL Person

#### Check -

##### The Scene

- Is it safe? How many victims are there? How could the accident have happened?
- Is immediate danger involved? Are there bystanders who can assist?
- Before checking the victim, put on protective gloves & follow Standard Precautions.

##### The Conscious Victim

- Check the victim for any life threatening conditions. If any of these conditions are present, Call 911.  
(Unconscious, difficult / no breathing, no signs of circulation, severe bleeding)
- For any conscious victim always get permission to help.
- Ask questions (What happened? Are you feeling pain, numbness or tingling anywhere? Any allergies? Are you taking any medications? Any known medical conditions? When did you last eat or drink anything?)
- Do a visual head to toe check of the victim (look for bruises, bumps, bleeding, sweating, signs of pain, trouble breathing, skin pale or red, signs of shock).

In emergencies when there is more than one victim, victim(s) with life threatening condition(s) are the priority to receive care.

## The Unconscious Victim

Position the victim if needed (place in recovery position if you leave victim to get help).

Conscious or Unconscious (do a tap and shout).

**A**irway - do a head tilt, chin lift

**B**reathing - look-listen-feel for breathing (For no more than 10 seconds)

If breathing normally, place in recovery position ONLY IF LEAVING THE VICTIM....IF STAYING WITH VICTIM LEAVE THE VICTIM FLAT ON BACK & MAINTAIN OPEN AIRWAY - MONITOR

**C**irculation check for severe bleeding

If unconscious Adult has Agonal Breathing (irregular, shallow, gasping) or is not breathing at all, begin CPR.

**Call** - Call 911, as soon as you discover a life threatening condition (\*unconscious, difficult/no breathing, chest pain or discomfort lasting more than 5 minutes, severe bleeding).

**Care** - Do no further harm, give specific care as needed, and monitor ABC's.

## Shock

- Signs of Shock include: rapid breathing and/or pulse, nausea, vomiting, skin color pale or blue tint, sweating & restlessness.
- If present, treat for shock: call 911, monitor breathing and circulation, control any bleeding-common cause for shock, if possible get the victim to lay down -some may not want to-don't force the issue, KEEP LEGS FLAT, keep the victim from getting too warm or chilled, reassure the victim, do not give the victim anything to drink or eat.

## Conscious Choking

- Check the scene and victim.
- Obtain consent to treat.
- If victim is coughing encourage them to continue coughing.
- If they stop coughing forcefully, summon more advanced medical personnel - Call 911.
- Stand beside the victim place your arm under victim's arm pit and across their chest to their opposite shoulder. Lean victim over; using other hand, perform 5 back blows perform 5 back blows between the victim's shoulder blades using palm heel - separate and distinct attempts.
- Stand / kneel behind the victim, slide one foot between the victim's feet.
- Locate the victim's belly button: place fist just above the belly button, thumb side in.
- Grab your fist with your other hand.
- Give 5 quick abdominal thrusts, inward & upward: repeat sequence of 5 back blows & 5 abdominal thrusts until the object is forced out, the victim begins to cough forcefully or victim becomes unconscious.

## Standard First Aid

### Burns

For all burns, cool them down with lots of cool water (to reduce continued burning). Cover the wound with dry sterile dressing (prevent infection). Don't use ice or ointments on the burn. Monitor the ABC's & for signs of shock.

### Controlling Bleeding

The two basic steps to control bleeding are listed below. Always watch victims of bleeding emergencies for signs of shock. Wear gloves to prevent disease transmission. These steps are done in order and you move onto the next step only if bleeding continues.

Step 1. Direct Pressure- apply sterile dressing to the wound and press down firmly.

Step 2. Pressure bandage- apply additional dressing and wrap with a roller bandage.

Tie a knot directly over the wound for additional pressure.

If the bleeding continues, make certain 911 has been called, add additional dressing and wrap another roller bandage around the wound.

A victim without obvious injuries should be monitored for Internal Bleeding.

The signals to watch for include:

- Complaints of pain.
- Tender, swollen & bruised body part.
- Vomiting or coughing up blood.
- Excessive thirst.
- Faint, confused or drowsy.

If you suspect Internal Bleeding, do not move the victim. Call 911 immediately and provide care for any symptoms you observe.

### Head, Neck and Back Injuries

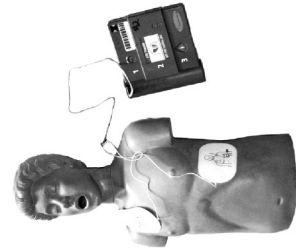
When you suspect a head, neck or back injury it is important to maintain the position of the victim. Your objective is to hold the affected body part in the same position that you find it. Do not try to straighten or align the position. The victim may complain of pain, pressure or severe headache.

- Minimize movement of the head, neck or back. Place your hands on both sides of the head, support the victim's head and prevent from moving. Once you begin, you must maintain the position until help arrives.

## Automated External Defibrillator (AED)

### AED Precautions/ General Information

- Do not use alcohol to wipe/dry the victim's chest; it's flammable.
- Do not let electrodes touch the metal surface.
- Do not use an AED on a child (*Under Age of 8*) or a person under 55 pounds.
- Remove a nitroglycerin or any medication patch. Wear protective gloves.
- Do not use a cellular phone or radio transmitter within 6 feet of the AED.
- If someone has a pacemaker, the AED can be used. Do not place AED pads directly over the pacemaker unit.
- The person should not be in a pool or puddle of water when the responder is operating the AED. In wet weather, be sure to remove wet clothing and dry the victim's chest before placing the AED pads.
- Pad placement is on the victim's Lower Left (LL) side and the Upper Right (UR). If AED pads risk touching each other, place one pad in the middle of the chest and the other on the back.
- Once the pads are placed on the chest, do not remove them unless advised to by AED Unit or emergency personnel.
- For every minute that defibrillation is delayed, the chance of survival is reduced by about 10%.



### Using an AED

- As soon as the AED is available, place the AED on the same side as the rescuer & near the head of the victim.
- Confirm the absence of breathing.
- Turn the AED On. Listen & follow the voice prompts provided by the machine.
- Dry the victim's chest & attach the pads to the victim's chest (LL & UR)
- Plug in the connector (electrode cable) into the AED, near the flashing light.
- If prompted to provide a shock: say "Stay Clear, shock advised", then provide shock (after the shock button light begins to flash) by pushing the button.
- If prompted, "No shock advised" then do a quick check for "Obvious Signs of Life", if none are present, begin CPR and continue to listen for prompts from the AED.
- ECC guidelines recommend 1 shock and 2 minutes of CPR (5 cycles).
- Turn the machine off only after being told to by 911 emergency rescue personnel.



### For a Pregnant Choking Victim

Perform **Chest Thrusts** and **Back Blows**



**Back Blows**



**Abdominal Thrusts**

If victim becomes unconscious, guide them to the floor and complete the following steps:

- Open the mouth and look for object.
- If object is seen, remove it with a finger sweep.
- If no object seen, give 2 breaths. (Each breath should last 1 second). If chest doesn't rise with initial breath, retilt the head before giving the second breath. If second breath doesn't make the chest rise, perform CPR starting with compressions. Before attempting future breaths, look for an object and if seen, remove it. As long as the chest doesn't clearly rise, continue cycles of giving 30 chest compressions, looking for an object and giving 2 rescue breaths.



## Adult CPR

Cardiac Chain of Survival: Early Recognition – Access to 911, Early: CPR, Defibrillation and Advanced Medical Care.

Cardiac Arrest is when:

The heart stops beating or beats too ineffectively to circulate blood to the brain and other vital organs.

Heart Attack is when:

There is death or damage to part of the heart muscle because blood & oxygen supply to the heart is reduced or stopped.

Signs and Signals of a Heart Attack include:

Chest pain or pressure lasting more than 5 minutes or that goes away and comes back; chest pain spreading to the neck, jaw or arm; shortness of breath or trouble breathing; nausea or vomiting and dizziness, light-headedness or fainting.

- While checking the victim you find, Unconscious - Call 911: is not breathing or not breathing normally, then begin CPR .
- Find hand placement (place your hand on the center of the victims chest ; only the heel of your hand should be touching the victims center breast bone , just above the notch at the end of the sternum).
- Position your shoulders over your hands, lock elbows and compress straight down AT LEAST 2 inches, Push hard, Push fast.
- After each compression, release pressure on the chest without removing your hands.
- Give 30 compressions at a rate of 100 compressions per minute (about 18 seconds for the 30 compressions).
- Give 2 breaths (Each breath should last 1 second). If chest doesn't rise with initial breath, retilt the head before giving the second breath. If second breath doesn't make the chest rise, perform CPR starting with compressions. Before attempting future breaths, look for an object and if seen, remove it. As long as the chest doesn't clearly rise, continue cycles of giving 30 chest compressions, looking for an object and giving 2 rescue breaths.
- Continue CPR until:
  - The scene becomes unsafe
  - You see an obvious sign of life
  - An AED arrives and is ready for use
  - Another trained responder or EMS personnel take over
  - You are too exhausted to continue

## Two-Person CPR

- When second rescuer arrives, after confirming 911 call, they should go directly to compressions at end of CPR cycle.
- The ratio for 2-person Adult CPR is 30 compressions and 2 breaths.
- Change positions about every 2 minutes, no "check Step". Always monitor for obvious signs of life (breathing).



One Person CPR



Two Person CPR