

# **The Basic Fundamentals of First Aid**

Compiled by KJ4GZR

## **THE THREE ABC'S**

There are six immediate priorities in first aid, regardless of the injury or illness. The acronym, "THREE ABC's," is a helpful mantra for recalling the six priorities. This expanded primary survey is a rapid evaluation of the scene and the patient in which life-threatening conditions, such as a blocked airway, severe bleeding, and cardiac arrest are recognized and simultaneous management is begun.

## **THE THREE ABC'S**

**A1 ASSESS the scene**

**A2 AIRWAY (ensure an open airway)**

**A3 ALERT others**

**B1 BARRIERS (gloves, pocket mask)**

**B2 Breathing (check for breathing and perform rescue breathing if necessary)**

**B3 BLEEDING**

**C1 CPR (start CPR if the victim has no pulse)**

**C2 CERVICAL SPINE (prevent unnecessary movement of the head and neck)**

**C3 COVER and protect the victim from the environment.**

## **CALL FIRST**

**If you are alone call first (911, EMS, etc.) for An Unconscious adult or adolescent**

(12 years or older) A child or infant who you see collapse suddenly. An unconscious infant or child known to be at high risk for heart problems.

*Call First* situations are likely to be cardiac emergencies, such as sudden cardiac arrest, except in children who collapse suddenly.

## **CARE FIRST**

If you are alone, Call First for an unconscious person younger than 12 years old. Any victim of drowning. Care First situations are likely to be related to breathing. If you are alone and have to leave the person for any reason – Place the person in a recovery position. This will help the airway remain open and clear if the person vomits.

## **CALLING 911**

Give the following information: \*Your name, \*The phone number you are calling from, \*What happened, \*Your exact location, \*How many people are injured, \*The condition of the injured people, \*What help is being given. After you have given this information, do not hang up until told to do so.

## **AIRWAY OBSTRUCTION**

Conscious Choking – Adult and child - What to look for: \*Clutching throat with one or both hands, \*Unable to cough, speak or breath, \*Coughing weakly or making high pitched sounds. What to do: Check the scene and the person,\* Send someone to call 911 and get permission to care. If coughing encourage the person to continue coughing. If unable to cough, speak or breathe (choking) give quick, upward abdominal thrusts. (Place the thumb side of the fist against the middle of the abdomen just above the navel, grab fist with the other hand) Repeat until object is forced out and person breathes or coughs forcefully on their own, or person becomes unconscious. If a person becomes unconscious place on back, first check the mouth for any objects, and then give abdominal thrusts.

## **MINOR WOUND CARE**

What to do: Check the scene and the person, Get permission to give care, using a barrier, apply direct pressure to control bleeding, wash the wound with soap and water, rinse about 5 minutes with clean running water. Apply a triple antibiotic ointment or cream if the person has no known allergies or sensitivities to the medication. Cover the wound with a sterile dressing and bandage.

## **NOSEBLEED**

What to do: Check the scene and the person, get permission to give care, have person lean slightly forward, pinch the nose shut for about 10 minutes, and apply a non-chemical ice pack to the bridge of the nose. IF Bleeding does not stop – apply pressure on the upper lip just beneath nose, seek medical care.

## **BREATHING EMERGENCIES**

What to look for: \*Trouble breathing, \*Shortness of breath, \*Skin appears pale or bluish, \*Dizziness or lightheadedness, \*Pain in the chest or tingling in hands, feet or lips, \*Unusually moist or cool skin.

What to do: Check scene and person, \*Call 911 If person is conscious – Have the person rest in a comfortable position, \*Check and care for other conditions you find. If the person is unconscious-

Tilt the head back and lift the chin to open the airway. LOOK, LISTEN AND FEEL for signs of life (movement and breathing) for no more than 10 seconds. If not breathing give 2 rescue breaths. If breathing normally, place in recovery position and monitor. IF NOT BREATHING AND NO OTHER SIGNS OF LIFE BEGIN CPR

## **CARDIAC (HEART) EMERGENCIES**

### **HEART ATTACK**

What to look for: \*Persistent chest pain or discomfort that lasts more than 3 to 5 minutes or more or that goes away and comes back, \*(May spread to shoulder, arm, back, neck or jaw), \*Shortness of breath or trouble breathing, \*Sweating or changes in skin appearance, \*Dizziness, light-headedness or fainting, \* May complain of heartburn or indigestion \*(these signals are more likely to occur in women, the elderly and diabetics), \*Denial that anything is wrong.

What to do: \*Check scene and person, \*Call or have someone call 911, \*

Help the person rest in a comfortable position. A sitting position may make breathing easier, \*loosen restrictive clothing, \* Assist with prescribed medications, \* offer aspirin if medically approved.

### **DIABETIC EMERGENCY**

Diabetics sometimes become ill because there is too much or too little sugar in the blood, in either case, giving sugar will not cause additional harm.

What to do: \*Check, \*Get permission to treat, \*If person is conscious and can safely swallow food or fluids and is a known diabetic, give sugar (fruit juices, non-diet soft drinks, table sugar), \*If person is not feeling better in about five minutes call 911, If person is unconscious - DO NOT GIVE ANTHING TO EAT OR DRINK call 911 and follow instructions.

### **EMBEDDED OBJECT**

What to look for: \*Pain, \* Visible object with open wound, \* Bleeding

What to do: \*Call 911, \*DO NOT REMOVE OBJECT (Place bulky dressings around the object to support object in place, Use a roller bandage to secure the dressing in place.

### **HEAT CRAMPS**

What to look for: \*Painful muscle spasms, usually in the legs and abdomen What to do: \*if possible have person rest in cool place, give small amounts of water or a commercial sports drink ,Lightly stretch and gently massage the muscle, watch for signals of heat illness.

### **HEAT EXHAUSTION (Early Stages)**

What to look for: \*Cool, moist, pale or flushed skin, \*Headache, nausea, dizziness, \*Weakness, exhaustion, \*Heavy sweating

## **HEAT STROKE (Late Stages)**

What to look for: \*Red, hot, dry skin, \*Changes in level of consciousness, \*Rapid weak pulse, \*Rapid shallow breathing, \* Vomiting

What to do: \*move person to cool place, \*Loosen tight or remove perspiration soaked clothing, \*Apply cool, wet cloths to skin or mist with cool water and fan the person, \*If conscious give small amounts of cool water to drink

IF PERSON DOES NOT IMPROVE QUICKLY, REFUSES WATER, VOMITS, LOOSES CONSCIOUSNESS OR SHOW SIGNS OF HEAR STROKE (LATE STAGES)- \*Call 911, Continue to cool by placing ice or cold packs on person's wrists, ankles, groin and neck and in armpits, \*If person becomes unconscious, be prepared for cardiac emergencies.

## **SEIZURES**

If you know the person has epilepsy, it is usually not necessary to call 911. CALL IF: \*The seizure lasts longer than 5 minutes or is repeated, \*The seizure follows a quick rise in the person's temperature, \*The person does not regain consciousness, \*The person is pregnant, \*The person is known to be diabetic, \*The person is injured, \*The person shows other life threatening conditions, \*The person has never had a seizure before.

What to do: \*Remove nearby objects that might cause injury, \*Protect the persons head by placing a folded towel or clothing beneath it. \* Do not hold or restrain person, \*Do not place anything between the person's teeth, \*Place the person on the side to drain fluids from mouth, \*When seizure is over, CHECK for breathing and injuries, \*Comfort and stay with person until fully conscious or EMS arrives and takes over.

## **SHOCK**

What to look for: The person - \*Is restless or irritable, \*Is nauseated or vomiting, \*Is experiencing an altered level of consciousness (e.g. is drowsy, confused or losses consciousness), \*Has pale, cool, moist skin, \*Has a blue tinge to lips and fingernails, \*Is breathing rapidly and has a rapid pulse.

What to do: \*Check and call 911, \*Monitor the person's airway, breathing and circulation, \*Control any external bleeding, \*Keep the person from getting chilled or overheated, \*Elevate the legs about 8 to 12 inches if you do not suspect a head, neck or back injury or broken bones in the hips or legs, \*Comfort the person until EMS arrives.

## **STROKE**

What to look for: \*Sudden body weakness or numbness, often on one side, \*Sudden facial drooping or weakness on one side of the face, \*Trouble speaking or being understood when speaking, \*Trouble seeing in one or both eyes, \*Sudden severe headache, \*Dizziness, loss of balance, \*Looking or feeling ill, abnormal behavior

What to do: Check and call 911. Care for the specific conditions you find \*If person is drooling or having difficulty swallowing, place person on the side keep airway clear.

## **F.A.S.T. – Recognition of Stroke**

**FACE:** Weakness on one side of face \*Ask the person to smile; this will show if there is drooping or weakness in the muscles on one side of the face.

**ARM:** Weakness or numbness in one arm. Ask the person to raise both arms to find out if there is weakness in one limb (both arms will not be raised to same level)

**SPEECH:** Slurred speech or trouble getting the words out. \*Ask the person to say a simple sentence or phrase and listen for slurred or distorted speech.

**TIME:** Time to call 911 if you see any of these signs. \*If the person has difficulty with any of these tasks or shows other signals of a stroke, note the time that the signals began and report to EMS.

**Hypothermia** (maybe) hypothermia is an abnormally low body temperature due to a cold environment. This could happen at an event such as the Charleston Marathon.

What to look for: \*Shivering, numbness, glassy stare, \*Weakness, impaired judgment, \*Possible loss of consciousness

What to do: \*Check, call 911, \*Care for any possible life threatening conditions, \*GENTLY move the person to a warm place if possible, \*Remove any wet clothing and dry person if possible, \*Warm the person gradually by wrapping in blankets. \*If person is alert, give warm liquids that *do not* contain alcohol or caffeine. DO NOT WARM PERSON TOO QUICKLY, rapid warming can cause dangerous heart rhythms.

## **HEAD, NECK AND BACK INJURIES**

What to look for: \*Person was involved in a motor vehicle crash, \* Person was injured as a result of a fall from greater than a standing height, \*Person complains of neck or back pain, \*Person feels tingling or weakness in extremities, \*Person is not fully alert, \*person appears to be intoxicated, \*Person appears to be frail or over age 65. What to do: CHECK call 911, \*Minimize movement, \*manually support the person's head as found.

## **MUSCLE, BONE AND JOINT INJURIES**

**SPLINTING:** A method used to keep an injured body part from moving. It can also help to reduce pain. Try and splint bones above and below the injured joint. Use what you have to make a splint, one leg to splint the other, newspapers for a leg injury. For an arm again use newspaper, blanket, etc. place arm in most comfortable position for person, keep in place with a triangle bandage, or pin shirt sleeve to shirt. For fractured ribs place a blanket or pillow between the injured ribs and the arm. Bind the arm to the body to help support the injured area. For ankle and foot injuries, immobilize the ankle and foot with a soft splint – a pillow or blanket, Do not remove the shoe. For hand and finger injuries, if you suspect that the finger is broken or dislocated tape injured finger to a finger next to it.

## **ALLERGIC REACTION**

What to look for: \*Trouble breathing, \*Feeling of tightness in the chest and throat, \*swelling of the face, neck and tongue, \*Rash or hives, \*Dizziness or confusion

What to do: \*Check the person carefully for swelling and breathing problems, \*If you suspect that a person is showing signals of poisoning, call the National Poison Control Center at 800-222-1222. If the person is unconscious or having trouble breathing or shows any of the signs listed above call 911. NOTE: If a person knows that they will have a severe allergic reaction, they may carry a epinephrine auto-injector.

## **WELCOME TO THE LOW COUNTRY**

**BEEES, HORNETS, YELLOW JACKETS, WASPS, SPIDERS (BLACK AND BROWN), FIRE ANTS, CATERPILLARS, TICKS, JELLYFISH, STINGRAYS, PIT VIPERS (RATTLESNAKES, COTTONMOUTHS, COPPERHEADS), POISON IVY, OAK, SUMAC AND MAYBE A CORAL SNAKE (ELAPIDS) OR TWO.**

Honey bees leave a stinger and venom sac in the victim after a sting, Hornets, yellow jackets, bumblebees, and wasps do not and may puncture a victim repeatedly. Pain is immediate and may be accompanied by swelling, redness and warmth at site. Treatment:

1. If anaphylactic shock occurs, immediate treatment is required with epinephrine and antihistamines.
2. After a honey bee sting, first remove the stinger and venom sac as quickly as possible. Even with the rest of the bee gone, the venom sac can still continue to pump venom into your skin. Do not hesitate or fumble for a pocket knife or credit card to scrape the stinger out of the skin. It is better to grab the stinger and yank it out quickly than worry about pinching or squeezing more venom from the sac.
3. Apply ice or cold water to the sting area.
4. Anesthetic sprays, swabs and creams may help relieve the pain.
5. For adults administer 25 to 50 mg diphenhydramine (Benadryl/ brand name) for progressive itching, swelling, or redness.

### **Improvise and take the sting out of bee and wasp venom:**

For bee venom (which is acid), apply a paste of baking soda and water. For wasp venom (which is alkaline) apply vinegar, lemon juice, or other acidic substance. Meat tenderizer applied locally to the sting site may also be effective in denaturing to venom and relieve pain and inflammation.

## **Marine Life Stings**

What to look for: \*Possible marks, \*Pain, \*Swelling, \*Possible allergic reaction.

What to do: If jellyfish – soak area in vinegar If stingray – soak area in hot water (not scalding) until pain goes away. Clean and bandage wound. Call 911 if signs of reaction.

## **Spider Bites**

What to look for: Bite mark, \*Swelling, \*Pain, \*Nausea and vomiting, \*Trouble breathing or swallowing.

What to do: \*Wash wound, \*cover with gauze, \*Apply ice or a cold pack, \*CALL 911. NOTE there is now specific antidote/antivenin now available for both Black Widow and Brown Recluse.

**CARDIAC ARREST: Does not respond (unconscious), No signs of life (movement or breathing)**

**CPR is beyond the scope of this introduction. A CPR course should be taken.**

**BUT if you feel the need to start CPR remember this simple point 2/30**

**Two breaths and thirty compressions.**

*If you are untrained on full CPR, you should give continuous chest compressions once you have called 911. Compress chest 30 times about 2 inches deep, give 2 rescue breaths (tilt the head and lift the chin, then pinch to nose, make sure you make a seal over persons mouth. Continue cycle of 30 compressions and 2 breaths until -----*

**ITEMS YOU MAY WANT TO CONSIDER ADDING: NOTE All information I have included below is based on adult dosage. If children are to be considered check with physician or pharmacy. AS always KEEP ALL medications out of the reach of children,**

Over the Counter and other Items: Non-Prescription Medications: IBUPROFEN (Motrin) Indications: For temporary relief of minor aches and pains associated with the common cold, headache, toothache, muscular aches, backache and arthritis. Also effective in reducing the inflammation associated with sprains, strains, bursitis, tendonitis, minor burns and frostbite. Reduces the pain of menstrual cramps and lowers fever. Dosage: Adults – 400 to 800 mg every eight hours with food. Do not take on an empty stomach. Warning: Do not take Ibuprofen if you are allergic to aspirin or any other non – steroidal anti – inflammatory drug. It may cause upset stomach or heartburn. Do not use if you have gastritis, ulcers or are prone to bleeding or on any blood thinner medication. Not recommended for use during pregnancy. Avoid if you have kidney disease.

**ACETAMINOPHEN (Tylenol) Indications:** For relief of pain and fever. Acetaminophen has no anti – inflammatory effect. Dosage: Adults – up to 1000 mg every six not to exceed 4000 mg (4 grams) in 24 hours. Older adults NO MORE THAN 3000 mg (3 grams) in 24 hours. Warning: In case of overdose, contact a physician or poison control center immediately. Do not use this drug if you have any liver disease, or if you regularly consume alcohol. Avoid if you have an allergy to this medicine.

**DIPHENHYDRAMINE (Benadryl) Indications:** Diphenhydramine is an antihistamine that can temporarily relieve runny nose, sneezing, watery eyes, and itchy throat due to hay fever or other respiratory allergies and colds. Relieves itching and rash associated with allergic reactions, and poison oak and ivy. Useful as an adjunct to epinephrine in the treatment of severe allergic shock. May also prevent and help relieve the symptoms of motion sickness. Dosage: Adult – 25 to 50 mg every four to six hours. Warning: May cause drowsiness. Individuals with asthma, glaucoma, high blood pressure, emphysema, or prostatic enlargement should not use unless directed by a physician. Not recommended for use in hot environments, when heat illness is likely, during pregnancy, or while taking other anti – cholinergic medications (consult physician before use).

**ALOE VERA GEL: Indications:** A topical treatment for first and second degree burns (sun burn), frostbite, abrasions and blisters. Dosage: Apply a thin coat to the affected area two to three times a day. Warning: Discontinue use if redness, swelling or pain develops at the site.

**HYDROCORTISONE CREAM USP 1%: Indications:** For temporary relief of minor skin irritations and allergic reaction. Dosage: Apply to affected area not more than three to four times a day. Warning: If condition worsens or if symptoms persist for more than seven days or clear up and occur again within a few days, stop use of this product and do not begin use of any other hydrocortisone product unless you have consulted a physician. In case of accidental ingestion seek professional assistance or contact a poison control center immediately. For external use only. Avoid contact with eyes.

**ALUMINUM HYDROXIDE AND SIMETHICONE TABLETS (Mylanta) Indications:** Each tablet contains both an antacid and an anti-gas ingredient. Helps relieve heartburn, acid indigestion, sour stomach and gas. Provides symptomatic relief of peptic ulcer disease and gastritis. Dosage: Two to four tablets between meals and at bedtime. Warning: Do not use if you have kidney disease. It can interfere with the absorption of certain antibiotics. If symptoms persist consult a physician as soon as possible.

**Other Items: Safety** pins, Duct tape. A small note book to keep record of what has been done and other important information, Pencil, Plastic re-sealable (zip lock) bags, Bandage scissors, Cotton tipped applicators (Q-tips)

**First Aid Kits** purchase or create your own. Size depends on how many people you think you might need to care for.

#### **WOUND MANAGEMENT ITEMS and BANDAGE MATERIAL:**

¾"x3" Adhesive plastic bandages; 1 and ¾" x 2" Small fingertip fabric bandages; 2"x4" Elbow and Knee plastic bandages; 36x36x51 Triangular sling/bandage; 2"x2" Gauze dressing pads; 4"x4" Gauze dressing pads; 3"x3" Gauze dressing pads; 2" Conforming gauze roll bandage; 3" Conforming gauze roll bandage; 5"x9" Trauma pad; Sterile eye patch; 4"x4" Non-stick dressing pads (Telfa); Alcohol cleaning pads; Antiseptic cleaning wipes (sting free); Triple antibiotic ointment; Instant cold compress; 1"x5 yds. First aid tape roll; Exam gloves