

# **FIRST AIDS BASICS.**

- **WHAT IS FIRST AID?:** is the immediate assistance or treatment given to someone injured or suddenly taken ill before the arrival of an ambulance, doctor or other appropriately qualified person.

According to the Spanish *Código Penal*: "*El que no socorriere a una persona que se halle desamparada y en peligro manifiesto y grave, cuando pudiere hacerlo sin riesgo propio ni de terceros, será castigado con pena de multa ...*".

Therefore we don't only have the moral duty of assistance but also a legal responsibility.

## **- AIMS OF FIRST AIDS:**

- 1.- To speed up the arrival of an ambulance, doctor or other appropriately qualified person.
- 2.- To preserve Life.
- 3.- To limit worsening of the condition.
- 4.- To promote recovery.

## **- HOW THE AIDER MUST ACT:**

- 1.- Being in control of yourself and the problem.
- 2.- Acting CALMLY and logically but also QUICKLY.
- 3.- Being GENTLE, CONFIDENT and FIRM.
- 4.- Building up TRUST.

## **- PRINCIPLES OF EMERGENCY FIRST AID:**

SAFE Approach:

- Shout for assistance. If possible, phone the universal emergency number (Europe: 112, USA: 911, UK: 999). Remember not to end the call until you are told to do so.
- Approach with care.
- Free the victim from dangers. Protect yourself and the injured person from danger or further injury. Look out for hazards such as oncoming traffic and fire. If you cannot reach the person without putting yourself in great danger, leave him or her and call the emergency services immediately
- Evaluate: This initial assessment is to check for any life-threatening conditions that need urgent first aid to preserve life.

- 1.- Check for consciousness: casualty respond and skin sensitivity.
- 2.- Check for Breathing and Circulation.
- 3.- Check for Bleeding and Deformities.
- 4.- Don't move the casualty until you make sure that there is not a spinal cord injure and if possible wait for him/ her to move by himself/ herself. Use Safety Position.

## Heartsaver® Adult CPR AED



## Heartsaver® Infant CPR



*Tap and shout*  
*Yell for help. Send someone to phone 911 and get an AED*



*Tap and shout*  
*Yell for help. Send someone to phone 911*



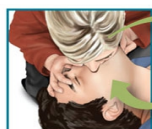
*Look for no breathing or only gasping*

*Push hard and fast. Give 30 compressions*



*Look for no breathing or only gasping*

*Push hard and fast. Give 30 compressions*



*Open the airway and give 2 breaths*

*Repeat sets of 30 compressions and 2 breaths*



*Open the airway and give 2 breaths*

*Repeat sets of 30 compressions and 2 breaths*



*When the AED arrives, turn it ON and follow the prompts*



*If you are alone after 5 sets of 30 compressions and 2 breaths, phone 911, and then resume sets of 30:2*

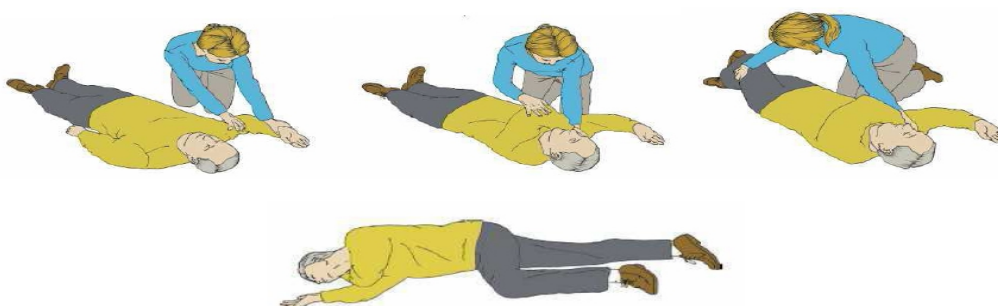
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(\*) Push two fingers above the distal end of the sternum.

(\*<sub>1</sub>) AED= Automated External Defibrillator.

(\*<sub>2</sub>) 911= Universal Emergency Number in USA.

## SAFETY POSITION



## MAIN CASUALTIES.

### 1.- BONES, JOINTS AND MUSCLES.

#### **FIRST- AID PRIORITIES.**

- Steady and support the injured part.
- Reduce swelling and internal bleeding (bruise).
- Obtain appropriate medical treatment as soon as possible.

#### 1. - **Assessment:**

(SALTAPS)

- S top and observe the injury.
- A sk questions about the injury: where it hurts, type of pain...
- L ook for specific signs: redness, swelling, foreign objects, bleeding...
- T ouch gently; palpate the injured part to identify painful areas and swelling.
- A ctive movement: ask the injured person if they can move the injured part of the body without help.
- P assive movement: if the person can move the injured part, carefully move it through a full range of movement (ROM).
- S trength testing.

(\* ) SALTAPS process should be stopped at an appropriate stage and followed in the order mentioned.

#### 2.- **General Treatment:** our objective will be to reduce swelling and bruising.

*First 48 hours.*

- R: rest.
- I: ice. Apply Ice for 15- 20 minutes (no more). Yo can repeat after 45- 60 minutes rest period.
- C: compress the injury.
- E: elevate the injured part.

*After the first 48 hours.*

- *Contrast Baths:*

- 1.- Submerge the affected body part in hot water for 3 minutes
- 2.- Submerge the same body part in cold water for 1 minute (you can change the time correlation as long as you make the cold water phase 1/3 shorter than the hot one water one).
- 3.- Repeat the cycle 5 times taking a total time of 20 minutes.
- 4.- Finish the bath with the cold water phase.

**3.- Explaining some specific concepts about Muscular Injuries:**

	<b>STRAIN</b>	<b>RUPTURE</b>	<b>SPASM</b>
	Overstretching of the muscle	Complete tearing of the muscle	A sudden, abnormal, involuntary muscular contraction.
<b><i>Treatment</i></b>	- Rest - Ice - Compress	- Rest - Ice - Compress	- Rest - Compress

**2.- WOUNDS AND BLEEDING.**

Any abnormal break in the skin or the body surfaces is known as a wound. Open wounds allow blood and other fluids to be lost from the body and germs to enter. If the bleeding is purely internal, the wound is closed.

**FIRST- AID PRIORITIES.**

- Control blood loss by applying pressure over the wound and raising the injured part.
- Minimize shock which can result from severe blood loss.
- Cover any open wound with a dressing (clean and lint free).
- Pay attention to hygiene, so that there is no spread of infection between the casualty and yourself.
- Make sure that there is no internal bleeding (*Cold and clammy skin, pale skin or pallor, bluish coloration of the lips or fingernails, confusion or loss of consciousness for even a brief moment, difficulty breathing, profuse sweating, rapid swelling, vomiting blood, weakness, loss of strength*).

## 1. - **Assessment:**

-S top and observe the injury.

-Ask questions about the injury: where it hurts, type of pain...

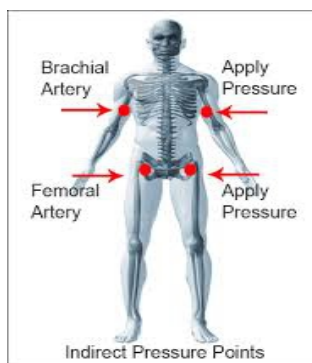
-Look for specific signs: redness, swelling, foreign objects, type of bleeding. *Arterial blood* is bright and under pressure, *Venous blood* is dark red and even though under less pressure than arterial blood. *Capillary bleeding* causes bleeding into the tissues (bruise).

## 2.- **General Treatment:**

- Remove or cut clothing to expose the wound.

- Apply immediately, direct pressure over the wound with your fingers, palm or a clean and lint free pad (if you use any kind of pad, never remove it until you make sure that bleeding is over). If you cannot apply direct pressure, press down firmly on either side as if you were trying to "close the gap".

(\* *Indirect Pressure: sometimes it is impossible to apply direct pressure so we can use "indirect pressure" on one of the pressure points above the bleeding artery.*



- Raise and support the injured limb above the heart level. Lay the casualty down to reduce the blood flow and minimize the shock.

- Leaving the original pad, bandage it firmly but not so tightly as to impede circulation.

### 3.- Explaining some specific situations:

#### - **Nosebleeds:**

- Sit the casualty down with her head held forward. Do not let her head tip back; blood may run down her throat and induce vomiting.



- If the nosebleeds persists over time take or send the casualty to hospital.

### 3.- AIRWAY OBSTRUCTION.

Many different circumstances could cause the obstruction: food, vomit, foreign material or even swelling of the throat after injury.

#### **FIRST- AID PRIORITIES.**

- Restore a supply of fresh air to the casualty's lungs.
- Look for medical aid.

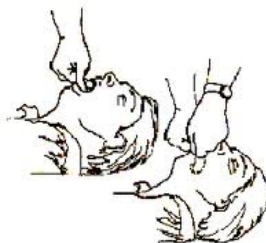
#### 1.- **Assessment:**

- Noisy breathing (listen to the breathing).
- Grey- blue skin.
- Flared nostrils

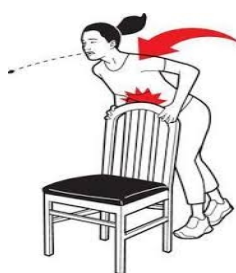
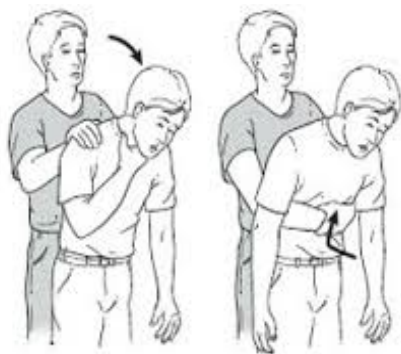


## 2.- **General Treatment:**

- Remove any obstruction extremely carefully (never pushing it deeper inside).



- When the foreign object is stuck at the back of the throat we call it "Chocking". In case of chocking we apply Heimlich maneuver:



## 4.- FOREIGN BODIES, BITES AND STINGS.

Any object that finds its way into the body through a wound in the skin or via one of the body's orifices is called a "*foreign body*".

### **FIRST- AID PRIORITIES.**

- Decide whether it is possible to remove the foreign body.
- Once the object has been removed, prevent from any risk of infection as if it was a wound.

### 1.- **General Treatment:**

- Gently clean the area around the foreign body with soap and water.
- Grasp the foreign body with the tweezers only if it comes out easily.
- Squeeze the wound to encourage a little bleeding. Clean the area.
- Check for tetanus immunization update.

### 3.- **Explaining some specific situations:**

#### ***Foreign bodies in the eye:***

- Advise the casualty not to rub the eye.
- Separate the eyelids to examine every part of the eye.
- If you can see a foreign body on the white of the eye, wash it out with clean water. If the foreign body is sticking in the eye cover the affected eye with an eye pad.

#### ***Foreign bodies in the nose and in the ear:***

- Obtain medical attention and do not attempt to remove the foreign body with your fingers or any instrument even if you can see it.

### 5.- BURNS AND SCALDS.

#### **FIRST- AID PRIORITIES.**

- To stop the burning.
- To relieve pain and swelling.
- To minimise the risk of infection.

#### 1.- **General Treatment:**

- Flood the injured part with cold water for a long period of time (4- 8 min) without touching it. If the burn is severe (covers a large part of the body), do not overcool the casualty by exposing him to cold water for a long period.
- Gently remove any jewelry, or clothing from the injured area before it begins to swell. Do not remove anything already sticking to the burn.
- Cover the area with a sterile dressing.



DO NOT apply adhesive dressings

DO NOT APPLY lotions, fats or ointments.

DO NOT break blisters (\*). If you need to continue the activity, just cover it to reduce friction.

(\*). *Broken blisters can be infected easily and cause serious damage.*



## 6.- CARDIORESPIRATORY AND NERVOUS SYSTEM DISORDERS.

### ASTHMA.



Is a disease of the airways. When you have asthma symptoms the muscles in the airways tighten and the lining of the airways swells and produces sticky mucus.

These changes cause the airways to become narrow, so that there is less space for the air to flow into and out of your lungs.

What are the **symptoms** of asthma?

- [ Wheeze or a whistling sound as you breathe.
- [ Tightness in the chest.
- [ Shortness of breath.
- [ Cough (especially at night or early morning).

### 1.- **General Treatment:**

- Stop the activity and sit the person comfortably. Reassure the person and don't leave him alone.
- Guide the casualty's breathing. Focus on inhaling and exhaling using abdominal breathing. Exhaling must be two times slower than inhaling. Doing this, we prevent from hyperventilation.
- If that process doesn't work, use the inhaler if available.

### FAINTING.

#### - **Assessment:**

Brief loss of consciousness that is caused by a temporary reduction of blood flow to the brain.

### **FIRST- AID PRIORITIES.**

- Position the casualty to improve the blood supply.
- Comfort and reassure the casualty. Fear and panic will put extra strain on the heart.
- Obtain appropriate medical assistance.



### 1.- **General Treatment:**

- Lay down the casualty and raise legs.
- Check pulse, breathing and response.
- Improve blood supply:
  - 1.- Take off casualty's shoes.
  - 2.- Apply cold water on wrists and back of the neck.
- Wait for the casualty to stand up by himself.
- Do not offer food or drinks until he is totally conscious and responsive.

### **UNCONSCIOUSNESS.**

This results from an interruption of the brain's normal activity. We are going to focus on a very specific situation in which unconsciousness is due to **alcohol intoxication**.

### **FIRST- AID PRIORITIES.**

- Never leave the casualty alone or put him to sleep.
- Ensure the airways are clear.
- Keep the casualty warm.
- Obtain urgent medical assistance.

### 1.- **General Treatment:**

- Ask someone else to call 112 or find urgently medical assistance.
- Ensure the airway is clear. Review "Airway Obstruction".
- Check and monitor the breathe an pulse level. In serious cases you may need to start CPR.
- Check the response level.

<b>A</b>	Alert	Alert and oriented to time, place
<b>V</b>	Responds to verbal stimuli	The person will respond verbally to questions but will not initiate speech
<b>P</b>	Responds to pain stimuli	Rubbing the sternum with your knuckles or pinching the earlobe results in wincing, pulling away, or other nonverbal responses
<b>U</b>	Unresponsive	Unconscious

- Place the victim in Safety position if you are suspicious of unconsciousness or the victim doesn't respond at all. This will prevent the victim from choking on his vomit (main risk in the event of unconsciousness).
- Keep the casualty warm.

You may have heard the following myths related to excessive alcohol intake. The could be very dangerous and are likely to risk the life of the person affected. **This person is in a life or death situation and needs immediate advanced medical care.**

**DO NOT** administer anything orally (food, coffee, liquids). It can induce vomiting.

**DO NOT** give the person a cold shower. The shock could cause the person to pass out and result in injuries.

**DO NOT** try to exercise the person. The person could fall and cause injury.

**DO NOT** try to restrain the person without (sober) assistance.

## - SAFETY IN SPORT:

All practical activities involve hazardous and unpredictable situations. In order to minimise risk and prevent injuries or casualties:

- Check all equipment is in good working order and that playing surfaces are also appropriate. Use individual protective equipment.
- Do a correct warm up before the activity.
- Follow the instructions given for the practice.
- Use the correct technique.
- Make sure rules are obeyed.

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- [www.redcross.org.uk/](http://www.redcross.org.uk/)

And the following courses:

- Bandages, casualties handling and transportation, effects of heat and cold, general rehabilitation.