



## How to stop bleeding

Bleeding refers to the loss of blood from blood vessels anywhere in the body. It varies in degree and severity depending on the nature of the accident.

The best way to stop bleeding is to apply direct pressure on the wound. This is one of the most effective ways to stop severe bleeding. It consists of the following steps:

- Use finger or hand pressure directly on the wound. Bleeding is likely to stop in a few minutes.
- This method isn't without minor risks and could lead to infection due to bacteria. To prevent this from happening, cover the wound with a clean piece of cloth or gauze before applying pressure.
- This method must not be used in case a foreign body is wedged in the wound or if bone fracture is suspected.



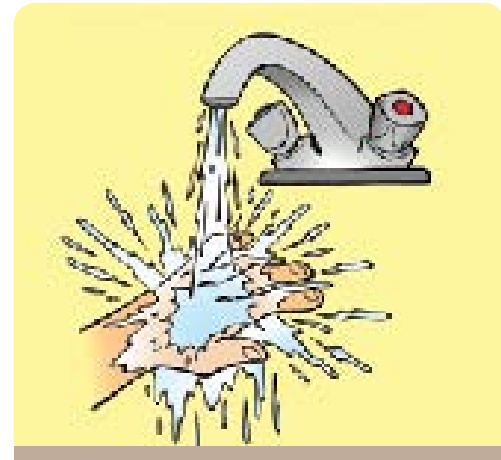
Place the palm of the hand or fingers over the bleeding area and press it directly

## How to treat burns

Burns are injuries to skin tissue caused by heat, fire, radiation or liquids (hot water or chemical liquids). Burns are painful and vary in degree and severity, and in some cases they cause blisters and swelling.

The following steps must be followed to treat burns:

- Run cool water over the area or immerse the burn in cool water for at least 10 minutes to stop it from spreading and to reduce pain and swelling.
- Remove any rings, watches, belts or anything that could further irritate the burn before it swells.



Do not put lotion or ointment on the affected area

- Cover the burned spot with a clean, preferably sterilised piece of cloth or gauze.
- Cover a burned face with a gauze mask and make sure to cut out holes for breathing.
- Do not burst the blisters or remove anything that is stuck to the burned spot.
- Do not apply any lotions or creams on the burned spot.

**N.B. For severe burns, call 999 for assistance.**

## How to treat bone fractures

A broken bone, or a bone fracture, is a term used to describe a crack or a break in a bone due to high impact or trauma to the bone. Some diseases can weaken bones and cause them to break, such as osteoporosis and tumours growing near the bone.

Symptoms and signs of broken bones include intense pain combined with limited mobility or inability to move a limb, swelling, bruising or bleeding and an out-of-place or misshapen limb or joint.

Applying First Aid for Cases of Fractures as follows:

- 1- Treat severe bleeding and breathing difficulty, if any.
- 2- Do the treatment on site.
- 3- Avoid unnecessary movement.
- 4- Fix the injured limb and place the splint on the joint, above and below the injured limb. In the absence of a splint, and the fracture was in the lower limbs, you could use the other limb to fix the fracture. If the fracture was in the upper limbs, you could use the patient's trunk to fix the fracture.



**First, treat severe bleeding and breathing difficulty, and then fix the movement of the affected limb.**

## How to carry injury victims without a stretcher

When a stretcher isn't available, you may need to move injury victims manually using one of the following methods:



If the victim is able to walk with some help:

- Use the “human crutch” method to move a conscious victim who is able to walk with some assistance.
- Hold the victim firmly around the waist and wrap his/her arm around your shoulders allowing him/her to lean on you.



In case the patient is of a lightweight: you could use the so called “firefighter lift”. This way is suitable for lightweight patients, whether they were conscious or unconscious. All you have to do is to follow these steps:

1. Crouch down.
2. Place one of the victim's arms across your shoulder and lift.
3. For more stability, wrap your arms around the victim's legs and grasp his/her other arm.



- If the victim is lightweight and conscious: carry the victim on your back if he/she is able to hold on using his arms. To ensure the victim's stability, you must hold him/her firmly by placing your arms under his/her knees while he/she crosses his/her arms over your chest.



- If the victim is lightweight: use the “crib carry” where you place your arms under the victim's shoulders and legs.

Remark: You must first make sure to fix the patient's neck before moving them, using the “Neck Collar” in the case there is no pending danger that requires the patient's immediate evacuation before ensuring the fixation of the neck.

## How to resuscitate heart attack victims

Heart attacks usually happen when the heart muscles are affected by a lack of blood supply. The symptoms and severity of heart attacks vary from one person to another. They occur suddenly at any time while working or resting. The patient's case may develop to a point where breathing stops and the absence of any sense of pulse. In this case, you have to act quickly to help the patient by doing the following steps:



**Turn the patient so that his/her face is upwards, while ensuring that his/her neck is safe and fixed.**

- 1- Check the patient's condition by patting gently with both hands (palms) on his shoulders.
  - Ask for help by paging or calling (999) for an ambulance.
  - Lay the patient down with his face upwards, on a flat and firm surface, and move his head and body at the same time.
- 2- Open the patient's mouth by raising his upper jaw slightly.
- 3- Push the patient's lower jaw down. If you notice any objects in the mouth or throat remove them.



**Check if the patient is breathing or not.**

- 4- Keep the position of the head raised by raising the jaws. Put your face close to the patient's mouth and watch his/her chest, look, listen and look for any signs of breathing for a period not exceeding (10) seconds.
- 5- If there was no sign of breathing, start applying artificial respiration from mouth to mouth.
  - Keep an open air passage, and close the patient's nose by using two fingers and blow the air into his mouth twice by taking two deep breaths as far as you can stretch your rib cage in case the patient was a child or an adult. If the patient is an infant, give him two short and quick breaths.



**Now, start the process of breathing from mouth to mouth.**

- 6- Then, sense the pulse by putting two or three fingers on the external side of the neck for a period not exceeding (10) seconds.
  - In the absence of pulse, start the respiration process from mouth to mouth at a rate of 12 times each minute until the patient starts breathing normally. After that, in case there was no pulse, start the cardiopulmonary resuscitation process immediately, abiding by the following exact steps (steps 7 to 10).



**Place the heels of your hands on the chest and avoid applying pressure on the ribs**

7. If no pulse can be felt, apply chest compressions as follows:

- Place the your lower palm on the middle of the breastbone, keeping your fingers away from the ribs. Put the lower palm of the other hand on top of this hand.
- Keep your elbow straight and press down firmly and quickly to achieve a downwards movement of 4 to 5 cm then relax and repeat the compression. Aim for 15 compressions per 10 seconds.



**Do not remove your hands from the chest in between compressions**

8. Pushing the patient's head back to open the air passage. Pinch the patient's nose and place your mouth over the patient's mouth and give him a couple of breaths.
9. Aim to complete nine cycles of 30 compressions/2 breaths in two minutes. Check for pulse at the end of every five cycles.



**Stop compressions immediately when pulse returns and check for breathing**

10. The moment pulse returns, immediately stop compressions and check for breathing. If you can't detect breathing, continue the artificial respiration until breathing returns to normal.

**P.S. Performing CPR and artificial respiration effectively requires training and frequent practice on resuscitation dummies.**

## Using of External Defibrillator Device for Cardiac Resuscitation:

Cardiac Arrest means total loss of the heart's mechanical function and pulse stop. In most cases, the heart stops with the sudden collapse of the patient and the stop of breathing as well. In this case, there is an immediate need for breathing from mouth to mouth and cardiac resuscitation until the emergency medical services arrive. There should be some attempts to restore the normal pulse of the heart. Death can occur within minutes if the normal pulse was not restored. The defibrillation process remains the only treatment that helps in cardiac resuscitation and restoring normal pulse.

Remark: External Cardiac Resuscitation Equipment is available in some shopping centers and public places.





## Defibrillator Device:

A «defibrillator» is a medical device used in treating serious heartbeat disorders, such as fibrillation and ventricular tachycardia as well as non-serious heartbeat disorders such as flutter and atrial fibrillation. The device helps eliminate the disorders the electrical signal transfer across the heart by directing a higher electrical current than the one generated in it due to the activity of the heart muscle cells, so that it stops all the random electrical signals. Thus, the heart electrically returns to the zero point and the beats returns to normal.

There are many types of Defibrillator Devices, according to the desired function and need. It is divided into monophasic and biphasic defibrillators. In the monophasic device, the electrical current moves in one direction from one pole to the other. In the biphasic device, the electrical current moves bi-directionally. These devices change the current direction in a short period. It is considered more effective in eliminating ventricular fibrillation. The percentage of patient recovery by using biphasic devices may increase from 28% to nearly 40%.



## Operating the AED



### Apply the following steps to operate the AED:

1. Open the case containing the chest electrode pads and plugs.
2. Wipe the patient's chest clean and dry and carefully remove the layer covering the pads.
3. Attach the electrode pads to the patient's chest. Place one pad on the right centre of the chest above the nipple and the other pad slightly below the other nipple and to the left of the ribcage.
4. Make sure the electrodes are firmly attached by pressing gently on the pad. Good attachment increases the chances for an effective shock.



## Seven easy steps to use an AED



1- Shout in the face of the patient, or pat on his shoulders strongly to check if the patient is conscious or not.



2. Call the emergency services on 999 and get an AED device.



3. Begin AED resuscitation.



4. Fix the defibrillator as shown in the picture on the device, and follow the its own voice instructions while continuing the breathing resuscitation procedures.



5. Click on the defibrillator to direct the shock, making sure that all those around are far from anything connected to the patient.



6. Continue CPR and check for pulse.



7. If pulse hasn't returned, continue CPR and use AED.

**Remark:** Some traditional devices depend on the operator instructions. In this case start applying an electrical shock when the device gives the complete charging signal.

## How to treat choking

### Choking due to blocked airways in an adult, alert patient



#### Look out for signs of choking

1. Ask the patient if he/she is choking.
2. Clenched fingers are a sign of choking.
3. If the patient can talk, breathe or cough, do not interfere to stop him/her from trying to remove the foreign object obstructing his/her breathing. Otherwise, perform abdominal thrusts until the foreign object is removed.



#### Wrap your arms around the patient's waist to perform abdominal thrusts

4. How to apply the abdominal thrusts:
  - Stand behind the patient and wrap your arms around the patient's waist.
  - Hold the fist of one hand with your other hand and put the side of your thumb in the middle or a little bit above the navel.
  - Press the fist of your hand on the patient's abdomen strongly, with quick thrusts inwards and then upwards in a J shape or «J» shape in Arabic.



#### Wrap your arms around the chest of the obese person or obese/pregnant women and apply the chest thrust.

- 5- If the patient was obese or a pregnant women in her final months, you should apply the chest thrust.
- 6- How to apply the chest thrust.
  - Stand behind the patient and put your arms under his armpits, surrounding his chest.
  - Hold the fist of one hand with your other hand and put the side of your thumb above the center of the chest bone.
  - Thrust quickly and backwards.
  - In case the patient lost consciousness, apply the steps of cleaning up the blocked air passage for an unconscious adult. (See next paragraph).

## Choking due to blocked airways in an adult, unconscious patient



### Open the patient's mouth and remove any objects inside.

- 1- Turn the patient on his back carefully and raise his head and neck a little bit, call (999) for an ambulance and ask for help.
- 2- Open the patient's mouth and push his jaw down and remove any objects inside his mouth with your fingers.
- 3- Make sure the patient is breathing looking, listening and sensing.



### Apply the Artificial Respiration

- 4- If the patient was not breathing, apply the artificial respiration from mouth to mouth.
- 5- In case the chest did not rise, change the location of the patient's head and repeat the breathing attempt.
- 6- In case the chest did not rise, crouch on the patient's knees, connect your hands and push 5 times on his abdominal area to the bottom of his rib cage, on a (J) shape.



- 7- Repeat raising the patient's head from the palate and check the mouth whether there are any objects inside.
- 8- In case of removing any objects, open the airway and check the breathing process.
- 9- In the event of respiratory arrest after removing any objects, apply the artificial respiration process (see artificial respiration page).
- 10- In case you did not remove the object, repeat steps 6 and 7.

## How to prevent electrical shock

- Check the safety of the circuit breaker on a monthly basis.
- Use only qualified technicians to carry out any electrical changes or maintenance work.
- Do not operate electrical appliances near water or with wet hands.
- Do not overload electrical circuits.
- Replace broken or cracked electrical circuits at once.
- Replace frayed or damaged electrical cords.
- Do not use electrical cords around sharp edges that could wear out the insulation layer.
- Unplug unused electrical appliances and keep the plug in a safe place.



### When helping an electrical shock victim:

- Disconnect the electricity supply before touching the patient.
- Use a fibreglass or wooden cane to move the victim away from the source of power/water.
- Perform artificial respiration and CPR.
- Call 999 for medical assistance.