

CVS-I-2

BASIC LIFE SUPPORT

INTRODUCTION

Sudden cardiac arrest is a leading cause of death worldwide. With the knowledge and skills of BLS one can save a life. Good quality CPR skills improve victim's chances of survival. Irreversible brain damage occurs in 3 to 5 minutes after a sudden cardiac arrest and CPR is most effective if it is started within this time.



Basic Life Support is an essential skill provided in a pre-hospital (and hospital) setting to victims of sudden cardiac arrest until advanced medical care is given. It can be provided by trained medical personnel or even a layperson trained in BLS.

LEARNING OUTCOMES

To perform Basic Life Support effectively in an emergency situation

SKILL

Motor

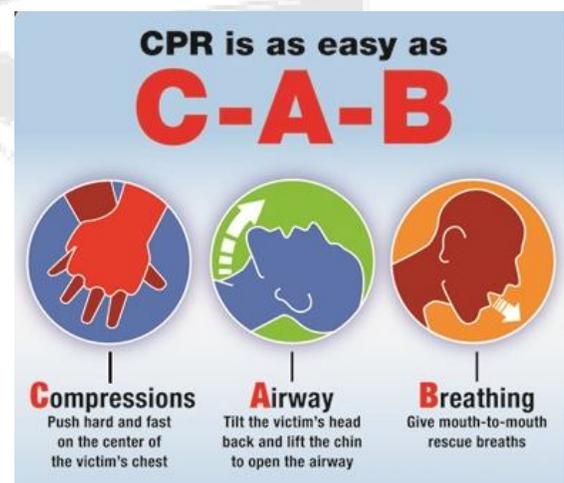
LEARNING OBJECTIVES

After the session the student should be able to:

- Demonstrate the steps of BLS for adult, children and infants correctly on a manikin.
- Demonstrate the steps to operate an AED
- Demonstrate Heimlich maneuver
- Demonstrate the maneuvers to relieve choking in responsive and unresponsive victim one year of age and older

STEPS OF CPR

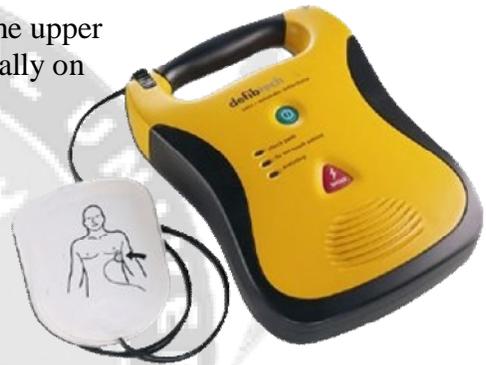
- Make the scene safe for the victim and for the rescuer.
- Check for response - Shake & Shout
- If patient not responsive, shout for help, and activate the Emergency Medical Services
- Check carotid pulse in adult and children and brachial pulse in infants for five seconds but not more than ten seconds
- Scan the chest movements and check pulse at the same time
- If there is no pulse or if you are not sure whether there is a pulse or not, give 30 chest compressions at the rate of 100 compression / min and depth of 1.5- 2 inches



- Use the heel of one hand on the lower half of the sternum in the center of the chest. Put the other hand on top of the first hand with fingers interlocked. The arms should be straight to ensure proper compression. Allow the chest to recoil after each compression
- Continue with 30:2 ratio of chest compressions and rescue breaths until Automated External Defibrillator (AED) arrives. After 30 compressions, stop compressions and open up the airway by head tilt and chin lift.
- After AED arrives, use it immediately.

AED STEPS

- Turn on the AED
- If wet, dry chest
- Apply pads. One pad should be applied vertically on the upper right chest below the clavicle and second pad horizontally on the lower chest below the armpit
- Plug in pads connector
- Stop CPR and clear the victim.
- Let AED analyze the rhythm
- If AED message reads “SHOCK” press and hold the shock button till AED delivers shock
- Check carotid pulse after every two minutes or five cycles of CPR
- If pulse appears stop CPR and start assisted breathing with bag mask device
- When victim starts breathing normally, put the patient in recovery position.



NOTE:

CPR can be provided both by one rescuer or more than one rescuer. When a second rescuer is available rescuer should be changed after every 5 cycles (2 minutes). Minimize interruptions in chest compressions to less than 10 seconds. Avoid hyperventilation.