



CARDIOVASCULAR
SYSTEM DISEASES,
BLS, CPR



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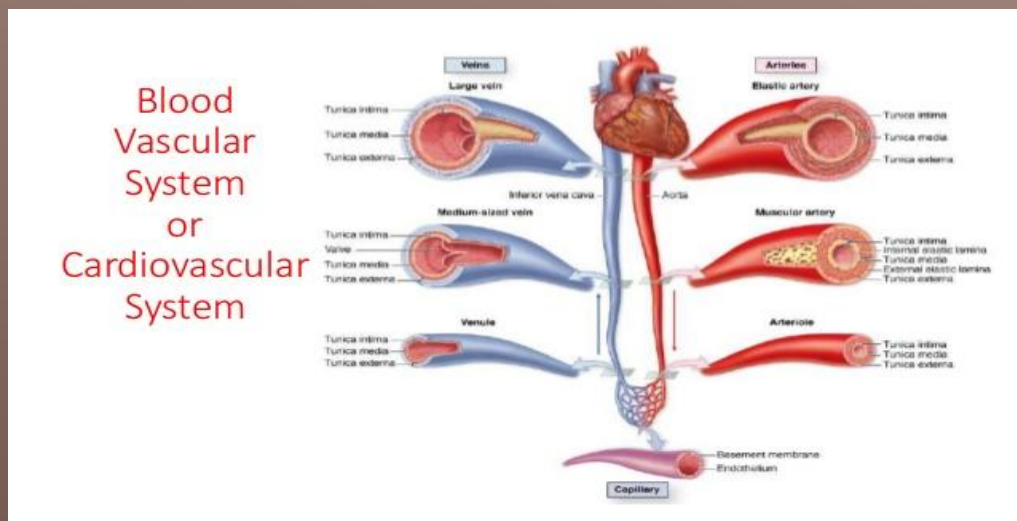
“MERCURY” FIRST AID TRAINING



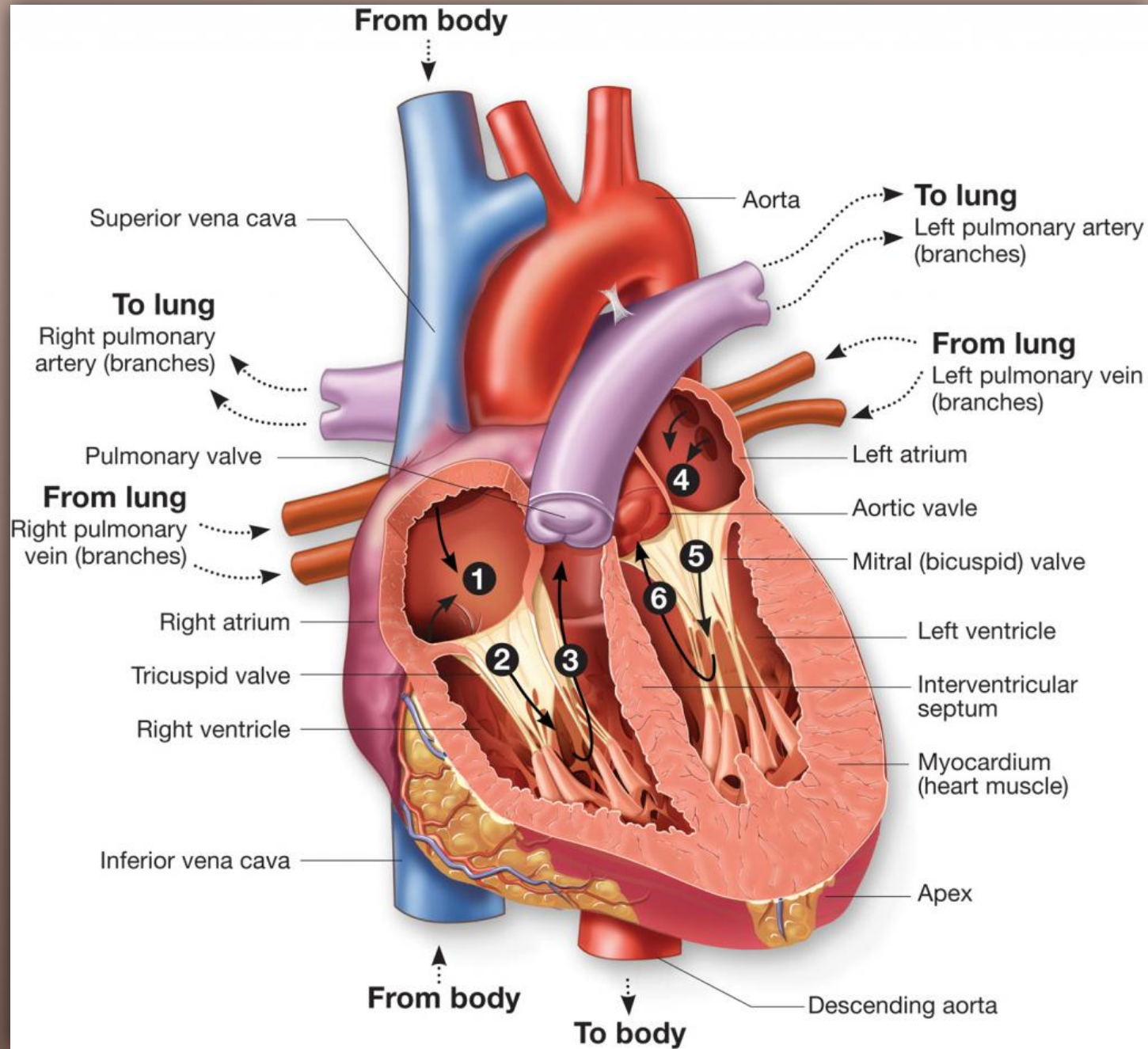
WELCOME TO OUR CLASS

A diagram of an ECG wave with cartoon characters representing the P, QRS, and ST segments. The P wave is a pink character saying "OK, Here I Come!". The QRS complex is a yellow lightning bolt character saying "I Got to Get From The Atrium To Ventricles". The ST segment is a purple character saying "Make'n It Happen... Ventricles Contract." and "I Think I'll Take A Little Rest." The T wave is a red character saying "Ready To Go Again!".

To Calculate Heart Rate:
Count the number of "R" waves in 6 seconds.
(6 large blocks X's 10 = 1 min rate)

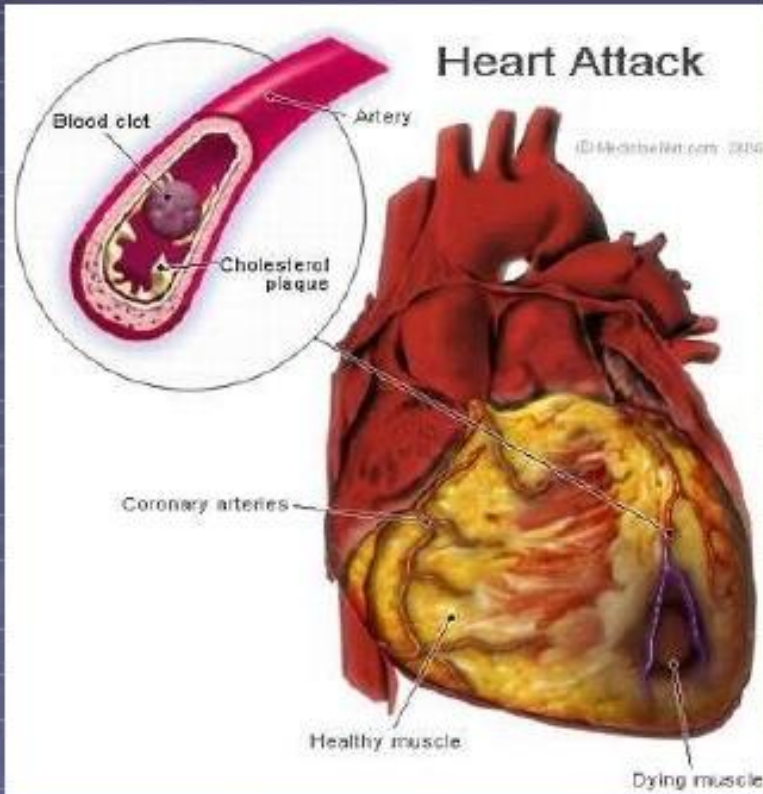
A diagram of an ECG grid showing a large square representing 20 seconds and a small square representing 0.5 seconds. The vertical axis is labeled "VOLTAGE" and the horizontal axis is labeled "TIME IN SECONDS".

TUTORIALS FOR CVD TRAINING



HEART ANATOMY

Cardiovascular System Diseases - Heart

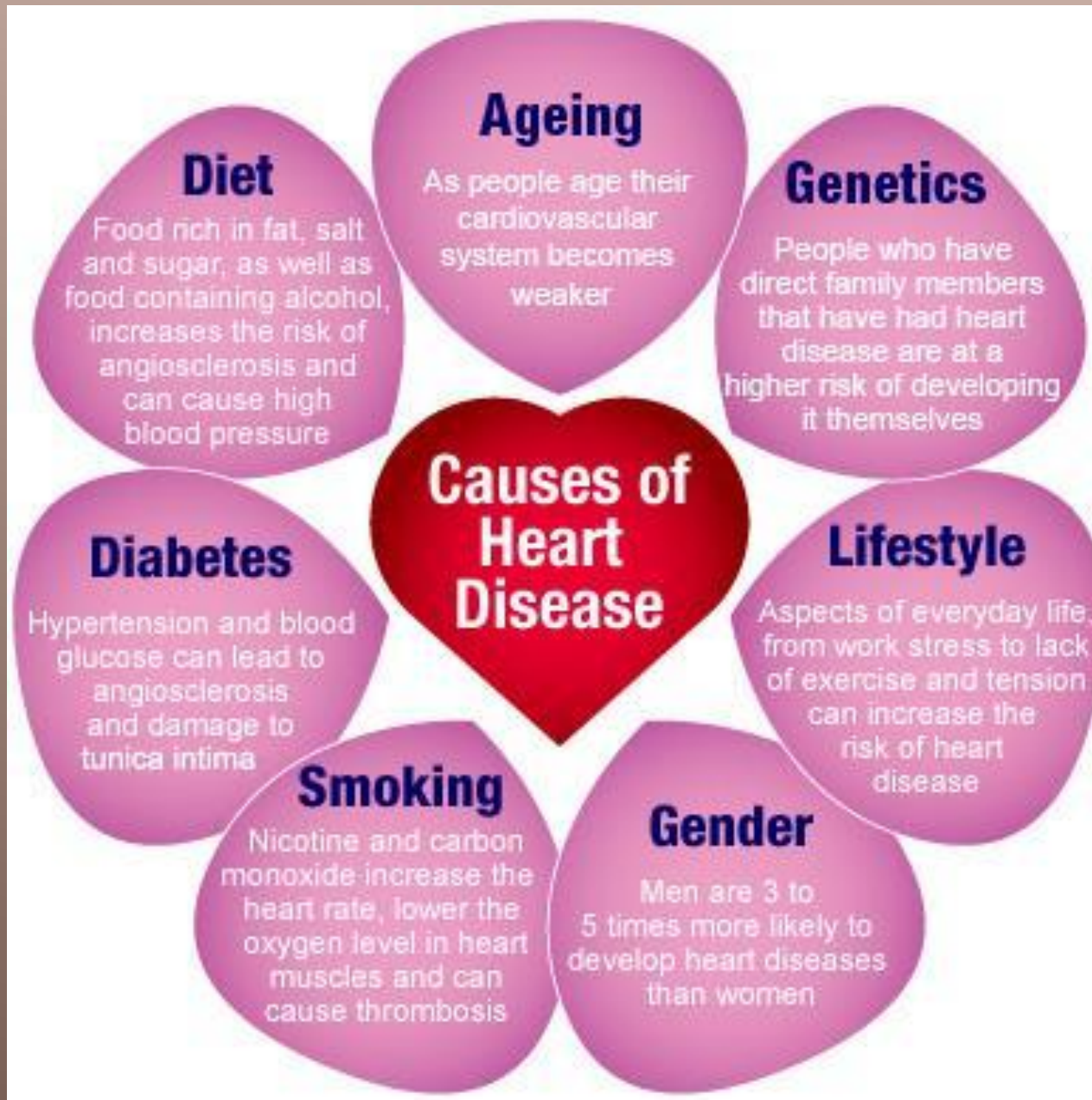


- Angina Pectoris
- Arrhythmia
- Bundle Branch Block
- Cardiac Arrest
- CardioMyopathy
- Congenital Septal Defect
- Congestive Heart Failure
- Coronary Artery Disease
- Endocarditis
- Fibrillation
- Flutter
- Heart Valve Prolapse
- Heart Valve Stenosis
- Myocardial Infarction - Heart Attack
- Myocarditis
- Pericarditis
- Tetralogy of Fallot

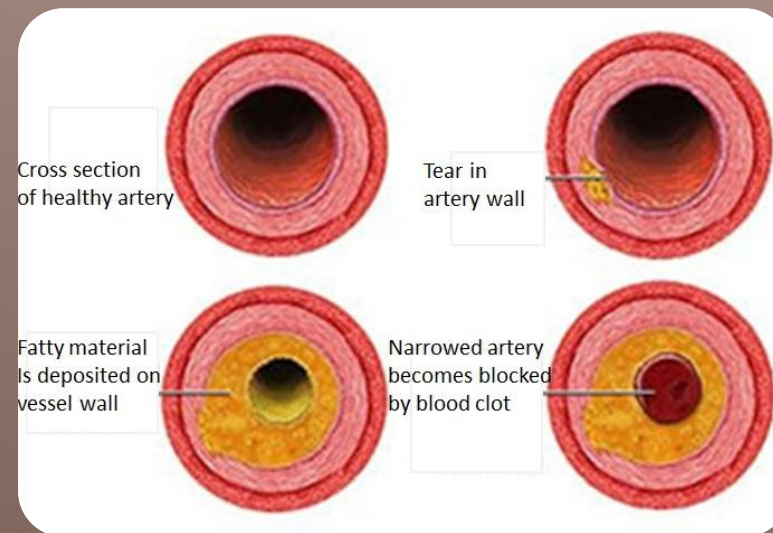
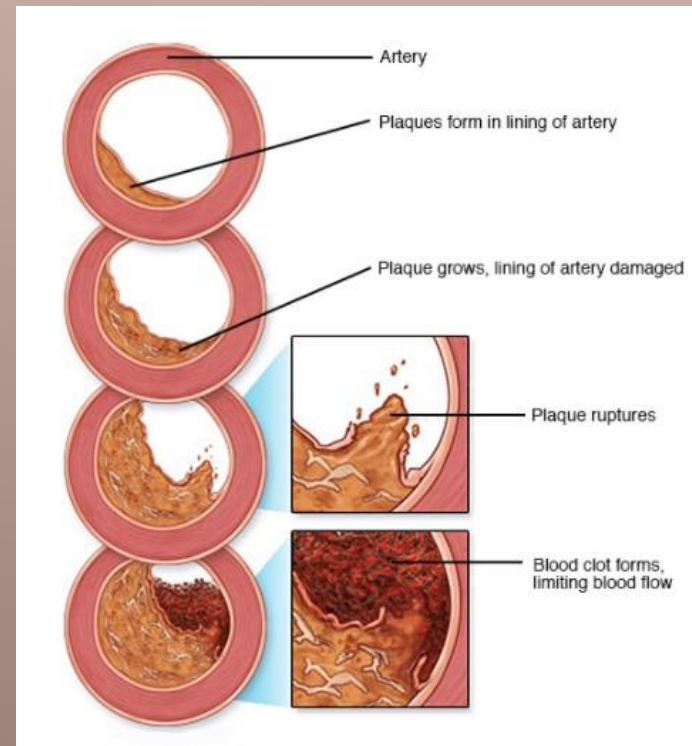
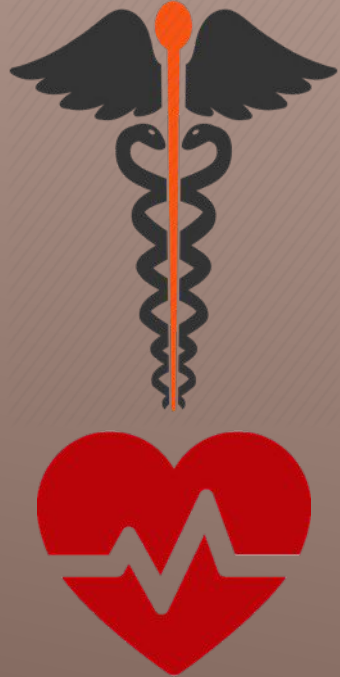


CARDIOVASCULAR SYSTEM DISEASES

- Pericarditis



MAIN CAUSES OF CVS DISEASES

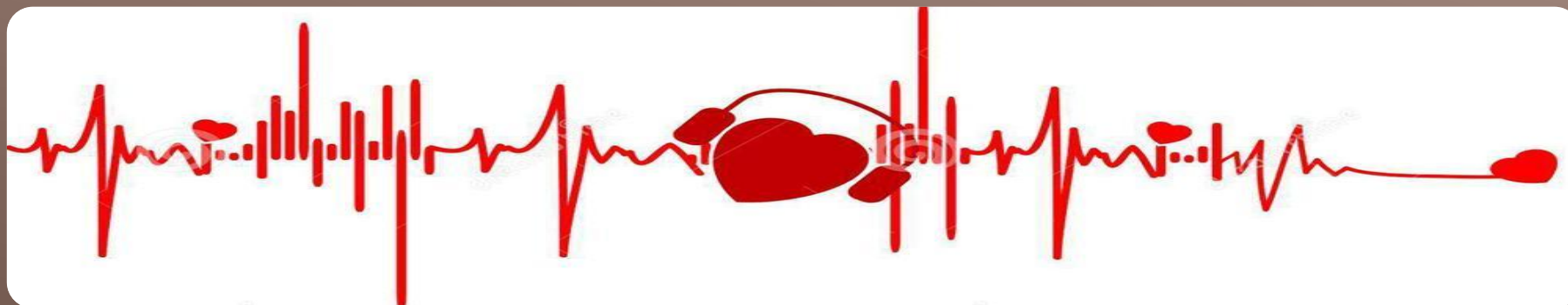


HEART MUSCLE NECROSIS AFTER PROLONGED ISCHEMIA

TIME FOR THEORY



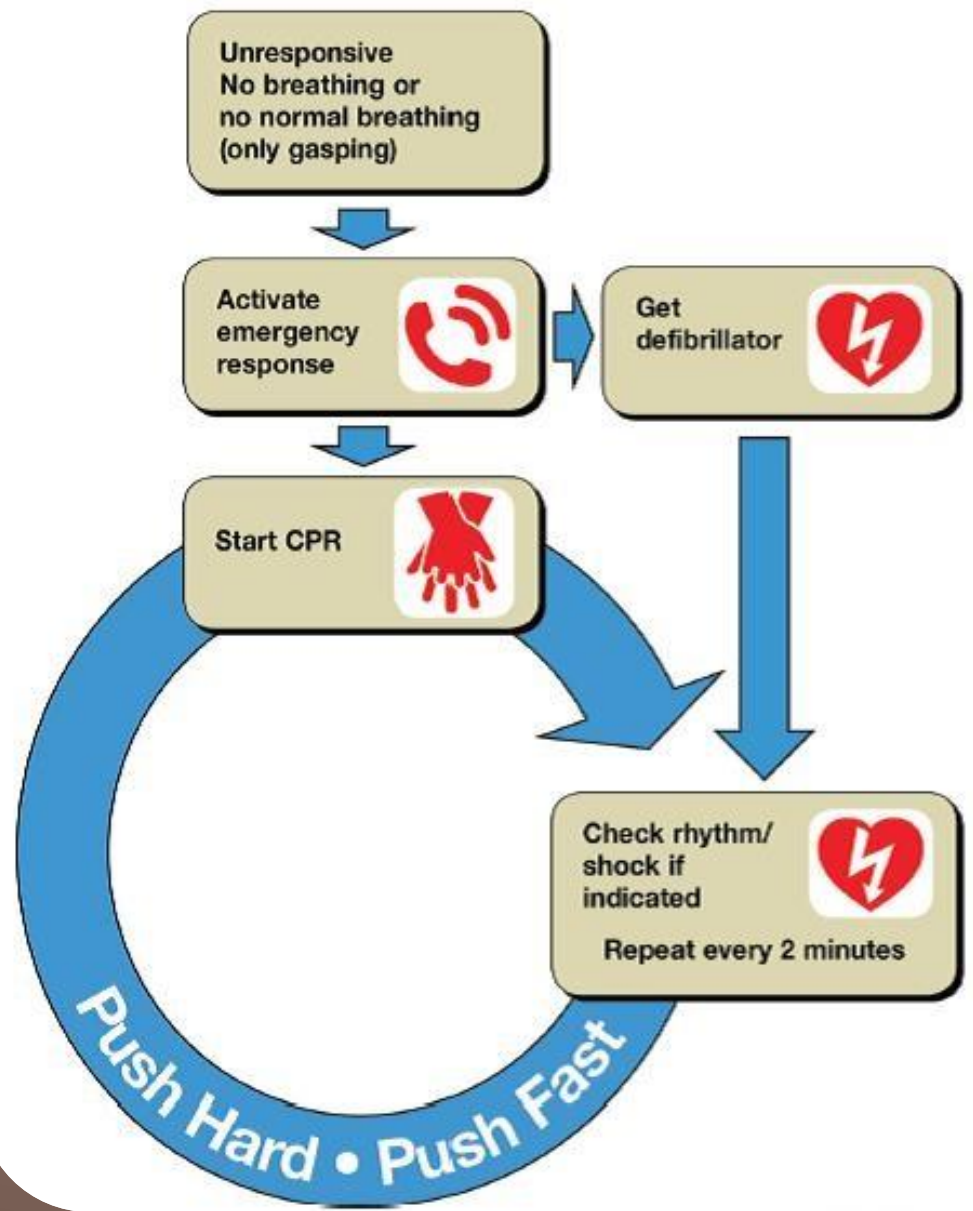
LEARNING TIME




TIME FOR PRACTICE




LEARNING TOGETHER




CPR is as easy as
C-A-B




C
Compressions
Push hard and fast
on the center of
the victim's chest



A
Airway
Tilt the victim's head
back and lift the chin
to open the airway



B
Breathing
Give mouth-to-mouth
rescue breaths

American Heart Association 
Learn and Live

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BLS AND CPR



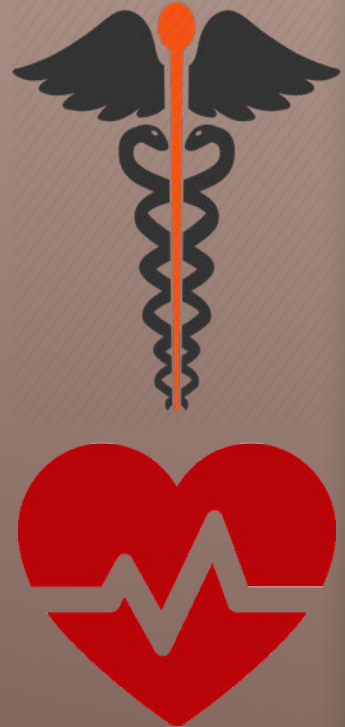
REFRESHING OF BLS ALGORYTHM



WHY ECG IS IMPORTANT?

Circulatory System Health

- You can prevent cardiovascular disease by exercise, eating healthy and NOT SMOKING
- A diet low in saturated fat and cholesterol is important for heart health
- Excess fat and cholesterol builds up on artery walls
- Excess weight gain enlarges the circulatory system, which causes the heart to pump harder





READY TO SAVE LIVES

CPR (Adult) Unresponsive and Not Breathing



1

Check Response

- Tap or squeeze shoulder. Ask loudly, "Are you Okay?" No response?



2

Call for Help!

- Have someone alert EMR and get an AED (Automated External Defibrillator).



3

Check Breathing

- Look quickly at face and chest for normal breathing. Occasional gasps are NOT considered normal



4

Give 30 Chest Compressions

- Place heel of one hand on centre of chest (lower half of breast bone)
- Place heel of second hand on top of first
- Using upper body weight, push hard, at least 2 inches in depth
- Push fast, at the rate of at least 100 times per minute. Allow chest to fully recoil



5

Open Airway

- Tilt-head-lift-chin to open the airway



6

Give 2 Breaths

- Pinch victim's nose
- Give 1 breath per 1 second
- Give 2 such breaths
- Make chest visibly rise with each breath
- Remember to take a fresh breath in between breaths

Repeat Cycles:(Step 4, 5, 6)



Child (1 year to puberty) - CPR

- All steps are the same as for Adult however use one hand for chest compressions as the pressure required for a child is less.
- Use two hands if required
- When two people are available, follow cycles of 15 compressions & 2 rescue breaths. 10 such cycles are to be given in 2 minutes



REMEMBER!



THANK YOU!

