Cardiovascular Disease

What makes up the cardiovascular system?

The heart and blood vessels

What is cardiovascular disease?

Any disease affecting the heart and/or blood vessels

TYPES OF CARDIOVASCUALR DISEASES

- 1. Angina Pectoris
 - a. Definition:

Chest pain occurring as a result of the heart not getting enough blood for a short period of time

b. What are the symptoms?

Chest pain that lasts anywhere from a few seconds to a few minutes, comes and goes very abruptly

c. What is the most common cause?

Atherosclerosis (plaque buildup on artery walls), mainly caused by diet

2. <u>Hypertension</u>

a. What is hypertension?

High blood pressure, estimated 46% of Americans suffer from this condition

Systolic – 1st number; indicates how much pressure your blood is exerting against your artery walls when the heart beats.

Diastolic – 2nd number; indicates how much pressure your blood is exerting against your artery walls while the heart is resting between beats.

Normal Blood Pressure = 120/80

b. Why is it known as the "silent killer"?

Because in the early stages, there are no warning signs to let us know we have it

- c. What are 3 ways to manage blood pressure?
 - Diet
 - Exercise
 - Medication (if diet/exercise do not work)

3. Arrhythmia

a. What is arrhythmia?

Irregular heart rate

b. Types of arrhythmia:

i. Fibrillation:

Irregular heartbeat rhythm, can happen in atria or ventricles ii. Tachycardia: Heart beats too fast (>100 bpm) iii. Bradycardia: Heart beats too slow (<60 bpm)

- c. Ventricular Fibrillation is the most serious condition of arrhythmia
- d. What is ventricular fibrillation?

Occurs when the heart beats with rapid, erratic electrical impulses. This causes pumping chambers in your heart (the ventricles) to quiver uselessly, instead of pumping blood

e. What is cardiac arrest?

When the heart totally stops beating

f. What type of treatment is most commonly used for serious conditions of arrhythmia?

It can be managed through medication

4. Heart Attack

a. What is a heart attack?

Gradual damage to the heart muscle caused by a reduced or blocked blood supply, usually because of atherosclerosis

There are approximately **1 million** heart attacks in the US each year. About **10%** of first-time heart attacks end in death.

- b. What are the warning signs of a heart attack?
 - ~ Pain/discomfort in chest
 - \sim Lightheadedness, nausea, vomiting
 - ~ Shortness of breath
 - \sim Joint, back, and neck pain
 - ~ Discomfort in arms/shoulders

5. Congestive Heart Failure

a. What is congestive heart failure?

When the heart muscle gradually weakens to the point that it cannot maintain its regular pumping rate/force

- b. What are the causes of congestive heart failure?
 - ~ Hypertension
 - \sim Atherosclerosis
 - ~ Heart valve defect

6. <u>Stroke</u>

a. What is a stroke?

When arterial blockage interrupts the flow of blood to the brain

- b. What are the warning signs of a stroke?
 - F Face (Drooping or numbed on one side of the face)
 - A Arms (Unable to move arm on one side)
 - **S** Speech (Slurred or incoherent speech)
 - T Call 911 at the first sign of stroke and note time symptoms started

RISK FACTORS OF HEART DISEASE

May factors you can control. 8 factors that we *can control* are:

- 1. Tobacco use
- 2. Alcohol use
- 3. Drug use
- 4. Diet
- 5. Stress
- 6. Activity level
- 7. Weight
- 8. Hypertension

Three (3) factors we *CANNOT* control include:

- 1. Age
- 2. Gender
- 3. Genetics/heredity