

CARDIOVASCULAR HEALTH



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Internal Medicine

Emory at Stonecrest Primary Care

What is Cardiovascular Disease?

- ▣ Disorders of the heart and blood vessels
 - Coronary heart disease
 - Cerebrovascular disease
 - Peripheral arterial disease
 - Rheumatic heart disease
 - Congenital heart disease

Facts about CVD

- Leading cause of death in the US
- About 695,000 people died from heart disease in 2021
- 1 person dies every 33 seconds from CVD
- Approximately \$239.9 billion was spent on CVD from 2018 to 2019

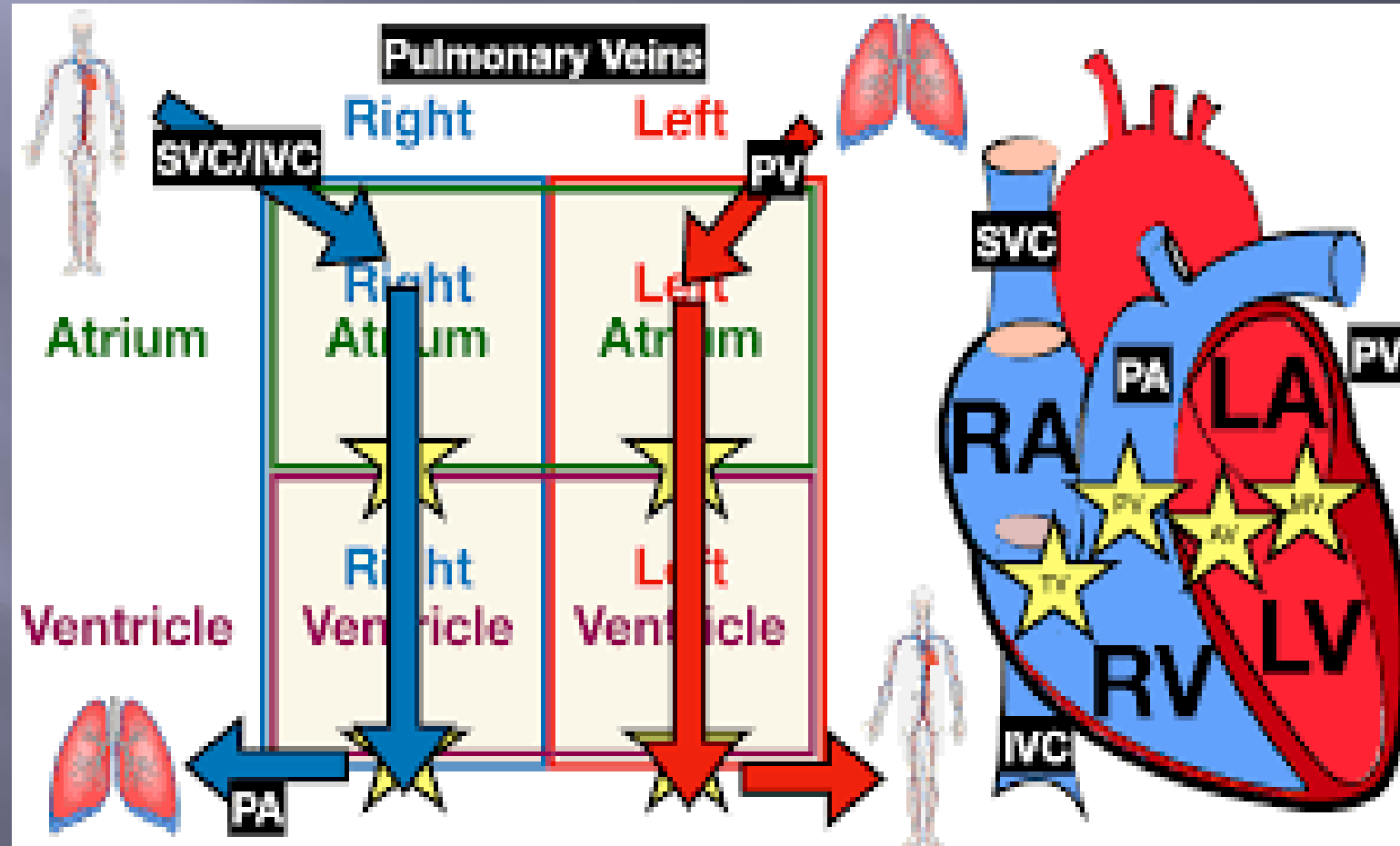
Facts about CVD

- ▣ Almost 50% of cardiac deaths occur before emergency services arrive
- ▣ 80% of CHD could be prevented by modifying certain risk factors

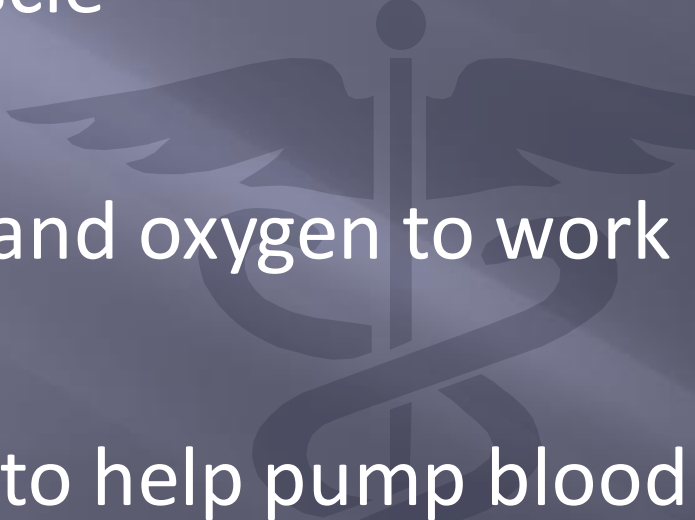
Coronary Heart Disease (CHD)

- ▣ Leads to:
 - Myocardial infarction (heart attack)
 - Angina pectoris (chest pain)
 - Hypertension
 - Stroke
 - Heart Failure

Anatomy of a heart



Heart Attack

- ▣ The heart is a muscle
 - ▣ Need blood flow and oxygen to work
 - ▣ Pressure gradient to help pump blood
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Heart Attack

- ▣ Usually acute events
- ▣ Build up of fatty deposits (plaques)
- ▣ Lead to blockage which prevents blood from flowing to the heart

What causes CHD?

- ▣ Unmodifiable risk factors
 - Age
 - Family History



Age and Gender

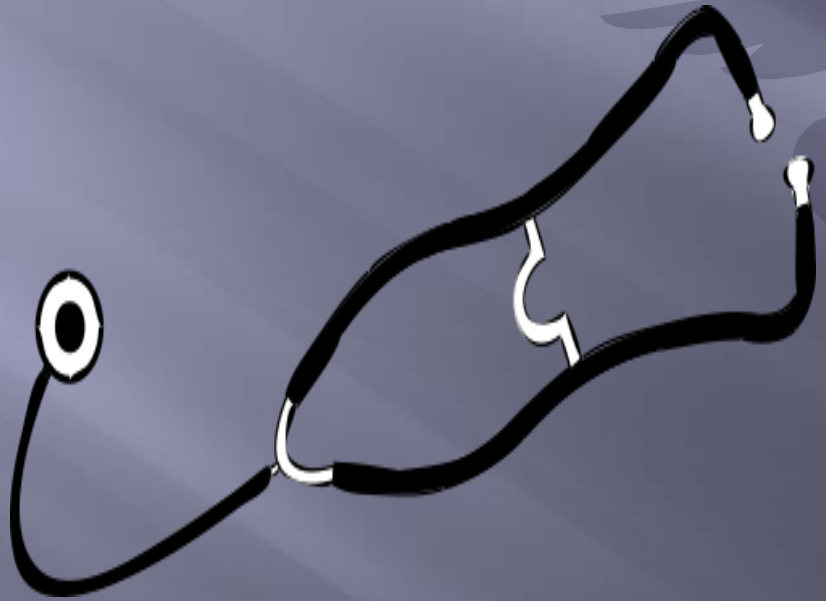
- ▣ Greater than or equal to age 55 years for men
- ▣ Greater than or equal to age 65 years for women
- ▣ Male gender or postmenopausal state in women

Modifiable risk factors

- ▣ Hypertension
- ▣ Diabetes
- ▣ Hyperlipidemia
- ▣ Smoking



Hypertension



- ▣ Almost 50% of adults (119.9 million) have hypertension
- ▣ Men > Women
- ▣ More common in non-Hispanic black adults
- ▣ Defined as BP > 130/80

Diabetes

- ▣ Both diabetes and prediabetes are associated with premature cardiac disease
- ▣ Over 38 million people in the US have diabetes, 98 million have prediabetes
- ▣ It is the 8th leading cause of death in the US
- ▣ Defined as a random blood sugar >200 or 2 fasting blood sugars > 126

Hyperlipidemia

- ▣ Defined as:
 - Total cholesterol > 200
 - HDL (good) < 40
 - Triglycerides > 150
 - LDL (bad) > 160

- Goal LDL less than 100 if diabetic and less than 70 if has CAD

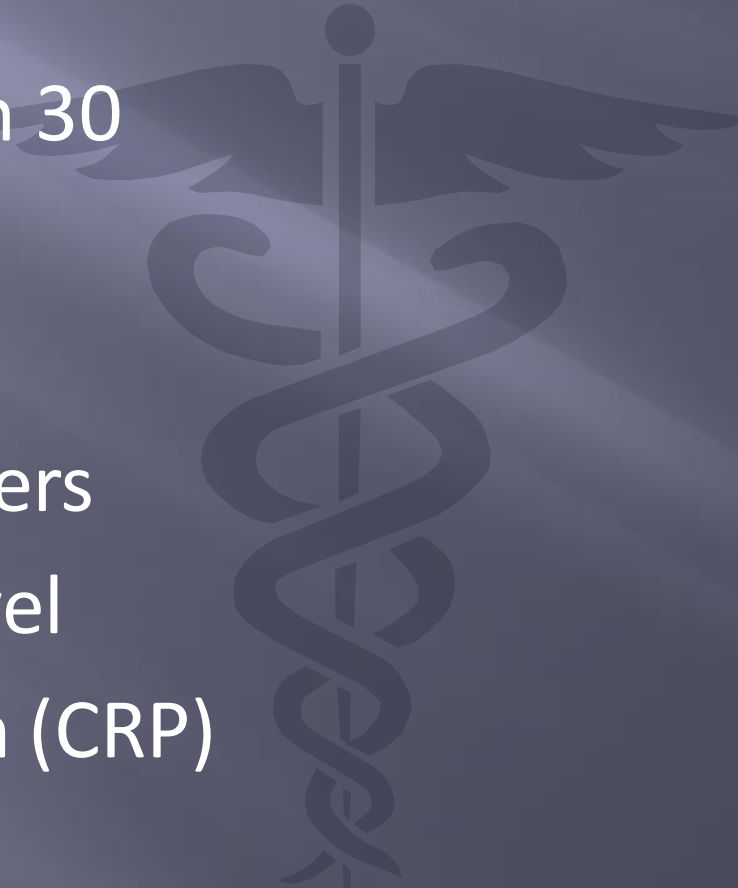
Smoking



- ▣ Increases the risk of heart disease and stroke by 2 to 4 times
- ▣ It damages blood vessels and elevates the blood pressure
- ▣ Quitting restores the risk of heart disease to that of a nonsmoker after 15 years

Intermediate risk factors

- ▣ Obesity
 - BMI greater than 30
- ▣ Physical inactivity
- ▣ Microalbuminuria
- ▣ Inflammatory markers
 - Homocysteine level
 - C-reactive protein (CRP)



Symptoms

- ▣ Chest pain
 - Pressure
 - Squeezing
 - Fullness
- ▣ Radiation to
 - Shoulder
 - Jaw
 - Elbows
 - Back
- ▣ Other symptoms
 - Lightheaded
 - Shortness of breath
 - Cold sweat
 - Nausea/vomiting
 - Paleness

Diagnosis

- ▣ Series of blood tests
- ▣ Electrocardiogram (EKG)
- ▣ Echocardiogram
- ▣ Stress test
- ▣ Heart catheterization and angiography



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Treatment



- ▣ Control high blood pressure
- ▣ Improve cholesterol levels
- ▣ Control diabetes
- ▣ Quit smoking

Treatment



- ▣ Get active
- ▣ Eat Healthy
- ▣ Achieve and maintain a healthy weight
- ▣ Manage stress

Summary

- ▣ CVD is the leading cause of death in the US for both men and women
- ▣ Heart attack and stroke are most common
- ▣ Most of the risk factors can be prevented
- ▣ Diet and lifestyle modifications can help
- ▣ Important to get regular physical check-ups

Questions?

