

# Heart Health



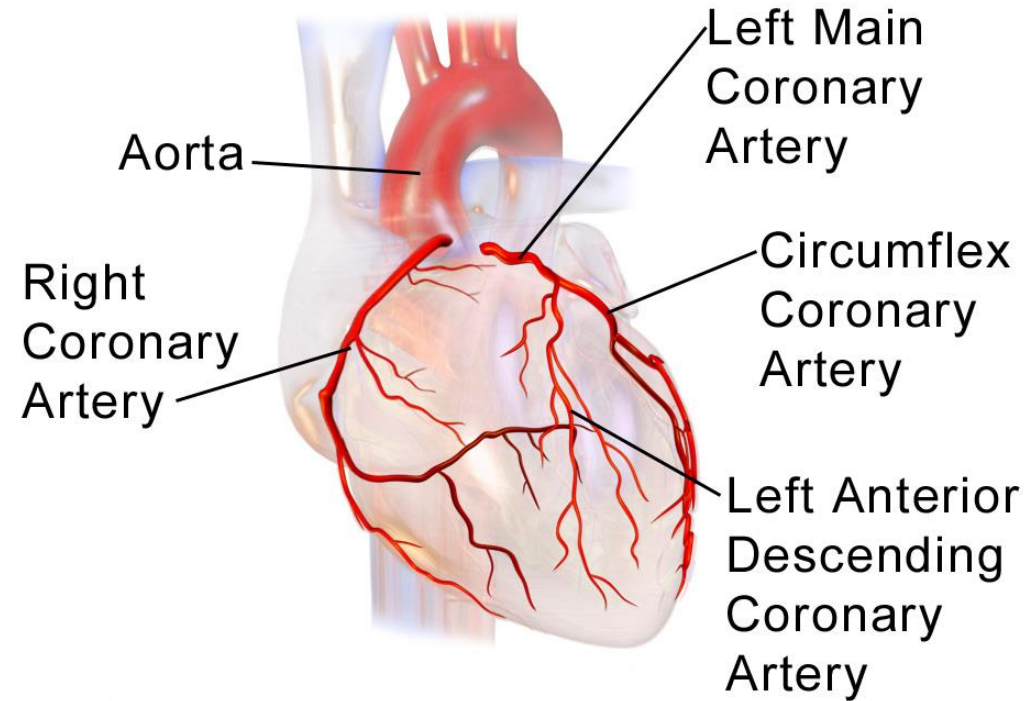
# Objectives

- What is Coronary Heart Disease (CHD)?
- Causes of CHD
- Who is at risk?
- Signs and symptoms
- Diagnosis
- Treatment
- Prevention



# Coronary Heart Disease

A disease in which a waxy substance called plaque builds up inside the heart arteries. These arteries supply oxygen-rich blood to your heart muscle. Over time, the plaque can harden, reducing the flow of blood to the heart.



**Coronary Arteries**

*Image Source: Wikimedia Commons - BruceBlaus*

# Causes of Coronary Heart Disease (CHD)

Research shows CHD starts when certain factors damage the inner layers of the coronary arteries. These factors include:

- Smoking
- High levels of fat and cholesterol in the blood
- High blood pressure
- High levels of sugar in the blood
- Blood vessel inflammation



# Major Risk Factors You *Cannot* Control

- **Age** – 82% of deaths from CHD involve persons 65 years of age or older
- **Gender** – Men are at greater risk than women
- **Heredity** – Children of parents who have CHD are more likely to develop heart disease
- **Ethnicity** – Higher numbers of African Americans have increased blood pressure, which can increase the risk of heart disease

# Major Risk Factors You *Can* Control

- **Smoking** – Smokers are 2-4 times more likely to develop CHD than non-smokers
- **High cholesterol** – High cholesterol causes the arteries to narrow and blood flow to be slowed or blocked
- **High blood pressure** – Increases the heart's workload, causing heart muscle to thicken and become stiff
- **Physical inactivity** – Regular moderate exercise helps prevent heart and blood vessel disease
- **Overweight** – Increases the heart's workload (at least 65% of people who develop high blood pressure are overweight)
- **Diabetes** – Diabetes and heart disease go hand in hand

# Other Risk Factors

- **Stress** – Stress may affect behaviors and factors that increase heart disease risk, including high blood pressure and cholesterol levels, smoking, physical inactivity, and overeating
- **Alcohol** – Excessive drinking can raise your blood pressure, cause heart failure, and lead to stroke
- **Diet** – Excessive fat, fried foods, and sugar contribute to heart disease



# Signs and Symptoms of CHD



## Angina

- Angina is chest pain or discomfort
- May feel like pressure or squeezing in your chest, shoulders, arms, neck, jaw, or back
- Can often be mistaken for indigestion

## Shortness of Breath

- Severity of symptoms may vary
- May become more severe as the buildup of plaque continues to narrow the coronary artery



# How is CHD Diagnosed?

Your doctor will base your diagnosis on your medical and family history, your risk factors for CHD, physical exam, and results from tests and procedures.

- **EKG** – A painless test that detects and records heart electrical activity.
- **Stress test** – Typically involves walking on a treadmill, or taking medication to mimic the effects of physical exercise, while monitoring heart rhythm, blood pressure, and breathing.
- **Echo** – Uses sound waves to create a moving picture of the heart. It also shows the heart's size, shape, and how well the heart chambers and valves are working.
- **Blood tests** – Checks for abnormal levels of fat, cholesterol, sugar, and protein in the blood.
- **Cardiac catheterization** – Uses dye and special x-rays to show the inside of the coronary arteries

# CHD Treatments

Lifestyle changes, medication, and medical procedures.

Goals include:

- Relieving symptoms
- Reducing factors to slow, stop, or reverse the buildup of plaque
- Lower the risk of blood clots (blood clots can cause a heart attack)
- Widen or bypass clogged arteries
- Prevent complications of CHD



# CHD Prevention



Adopt a healthy lifestyle!

- **Follow a healthy diet** – Whole grains, fat-free or low-fat dairy products, and lean meat
- **Maintain a healthy weight** – Work with your healthcare provider or a registered dietitian to create a reasonable weight loss/maintenance plan
- **Get active** – Aim for 20 minutes of moderate exercise every day
- **Stop smoking** – Quitting can cut your chance of heart attack by 1/3

# Time is Muscle!

The sooner medical attention is sought, the better the outcome after a heart event! Seek immediate help if you experience the below. **Do not drive to the hospital—call 911!**

- Pressure or pain in the center of the chest
- Pain or discomfort that spreads to the shoulders/neck/arms/jaw
- Sweating, clammy skin, and/or paleness
- Shortness of breath
- Nausea or vomiting (women in particular)
- Dizziness or fainting
- Rapid or irregular heartbeat/pulse
- Generalized feeling of fatigue (women in particular)
- Indigestion (women in particular)





# Any Questions?

# Sources

- OSF HealthCare ([www.osfhealthcare.org](http://www.osfhealthcare.org))
- National Heart, Lung, and Blood Institute ([www.nhlbi.nih.gov](http://www.nhlbi.nih.gov))
- American Heart Association ([www.heart.org](http://www.heart.org))

# Total health

