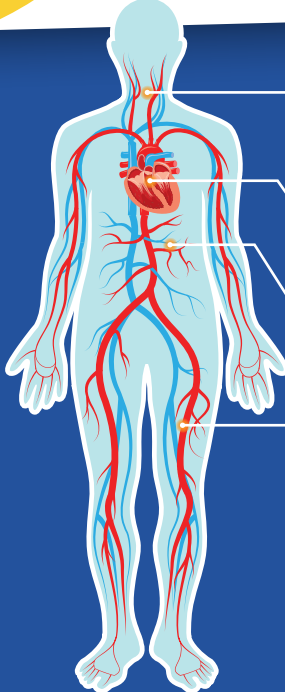


ATHEROSCLEROSIS & ITS SERIOUS CONSEQUENCES

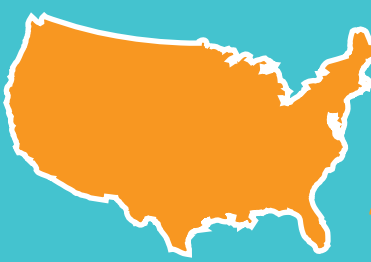
Atherosclerosis is the narrowing or hardening of arteries from the build-up of plaque – deposits of fats, cholesterol, and other substances – that can block normal blood flow or break-off and cause a clot



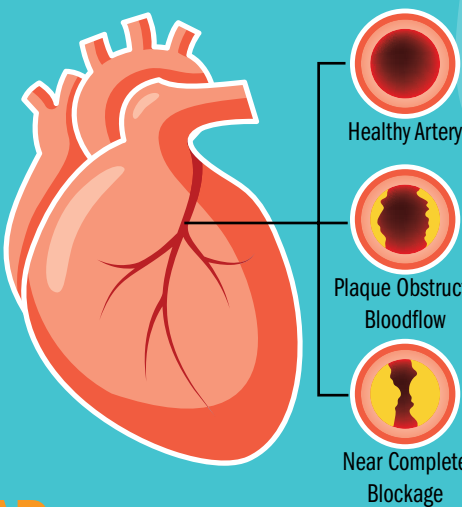
ATHEROSCLEROSIS can affect any artery in the body and can cause different diseases based on which arteries are affected:

- **CAROTID ARTERY DISEASE** results from atherosclerosis in the arteries that supply blood to the brain and is a major cause of stroke
- **CORONARY ARTERY DISEASE (CAD)** – also called coronary heart disease – results from atherosclerosis of the arteries that feed the heart and is the leading cause of heart attack
- **CHRONIC KIDNEY DISEASE** can result from atherosclerosis in the renal arteries and can lead to loss of kidney function
- **PERIPHERAL ARTERY DISEASE (PAD)** commonly refers to atherosclerosis of arteries in the legs and is a major cause of amputation and ulcers

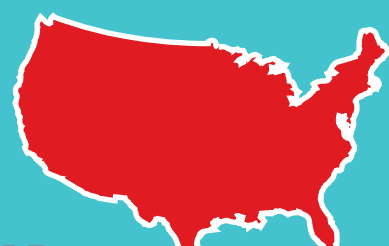
CORONARY ARTERY DISEASE CAD



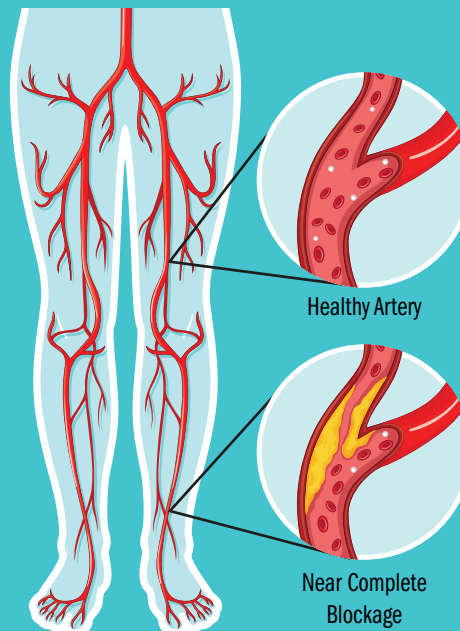
CAD affects **~16.5 MILLION AMERICANS**



PERIPHERAL ARTERY DISEASE PAD



PAD affects **~8.5 MILLION AMERICANS**



1 in 2 middle-aged men

At **RISK OF DEVELOPING CAD** in their lifetime

1 in 3 middle-aged women

PAD is **underdiagnosed** and **undertreated**

1 in 7 Americans **AGES 70+ HAVE PAD**

Only **1 in 4** people **EXPRESS FAMILIARITY** with **PAD**

CAD is the **most common type** of heart disease in the U.S.

RISK FACTORS & SYMPTOMS

CAD can restrict blood flow to the heart, starving it of vital oxygen and nutrients and leading to:

- Angina (chest pain)
- Shortness of breath
- Fatigue
- Nausea/vomiting
- Irregular heart rhythm
- Heart attack/heart failure

Just **1 cigarette per day increases CAD risk by 48-74% in men & 57-119% in women**

Smoking **increases risk of PAD by 2-4X** and brings on symptoms **~10 years earlier**

PAD & CAD SHARE MAJOR RISK FACTORS



AFRICAN AMERICANS are **~2X more likely** than non-Hispanic Whites to have **PAD**

1 in 3 people **ages 50+** with **DIABETES** are likely to have **PAD**

PAD can restrict blood flow to the limbs and lead to:

- Cramping, pain, or discomfort in the hips, legs, or feet that may go away with rest
- Heaviness, weakness, or numbness in the legs causing difficulty walking
- Lower legs or feet that are colder than the rest of the body

• **50%** of people with **PAD** are asymptomatic

As **PAD** progresses it can lead to:

- Leg or foot wounds that don't heal
- Shiny or discolored skin on the legs and feet
- Poor nail growth
- Hair loss or slowed growth on feet and legs
- Erectile dysfunction in men

COMPLICATIONS

- **CAD** is the leading cause of death in the U.S., killing close to 370,000 people each year
- **CAD** is the most common cause of sudden cardiac death — which accounts for ~50% of all deaths from cardiovascular disease in the U.S.
- **CAD** is the most common cause of heart failure

In one 3-year period

~30% of patients with **CAD** : **~40%** of patients with **PAD**

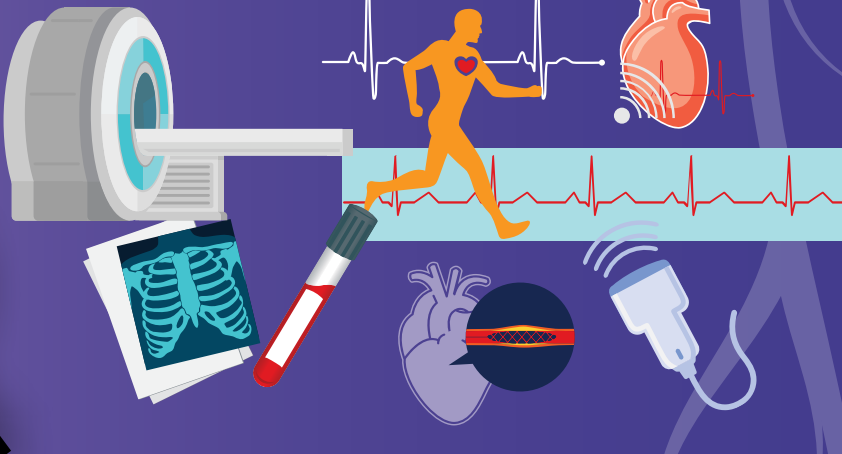
experience at least one of the following:

HEART ATTACK, STROKE, VASCULAR DEATH, OR REHOSPITALIZATION for a different vascular event

- **PAD** causes more than 56,000 deaths each year
- Each year ~186,000 Medicare beneficiaries suffer from amputations due to **PAD**
- **PAD** increases the risk of CAD by 2-4X
- African Americans have a 37% higher risk of amputation from **PAD** than whites

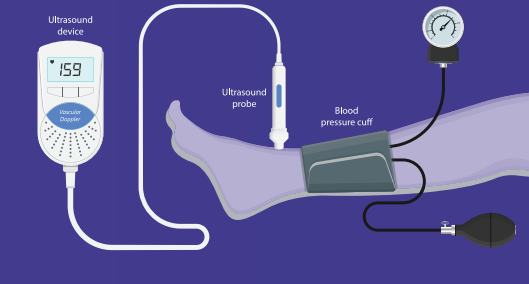
DIAGNOSIS

A variety of tests like echocardiograms and other imaging, and more invasive tests like coronary angiograms can diagnose **CAD**



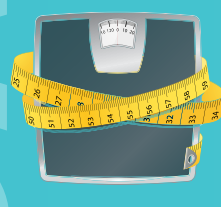
PAD on the other hand can often be diagnosed with a simple exam of the feet — **take your socks off at visits!**

The **ankle brachial index (ABI)** is also a simple test that compares blood pressure in the arms and legs to look for decreased circulation



PREVENTION

PAD & CAD can sometimes be **PREVENTED** with a **HEALTHY LIFESTYLE:**



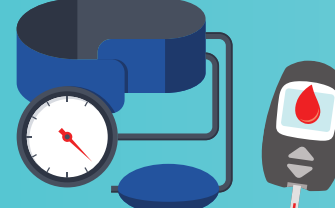
Weight management



Heart healthy diet



Not smoking



Control of blood pressure, cholesterol, and diabetes



Exercise and daily activity

TREATING CAD & PAD

Lifestyle changes, as well as medications to lower cholesterol and high blood pressure and to manage diabetes, may help control atherosclerosis



Anticoagulants may be prescribed to reduce the risk of stroke



For serious blockages, patients may need clot-dissolving drugs, angioplasty to widen and keep the artery open, or bypass surgery to place a new vessel around the blockage