WHAT IS CARDIOVASCULAR DISEASE?

• Cardiovascular disease, commonly referred to as Heart Disease

• Describes a range of conditions that affect the heart, mostly related to a process called artherosclerosis

• Artherosclerosis is a condition that develops when plaque builds up in the walls of the arteries
  > The buildup narrows the arteries and makes it hard for blood to flow which can cause blood clots stopping blood flow all together
  > This condition can cause a heart attack or stroke

HEART ATTACK

• Occurs when a blood clot blocks blood from flowing to a part of the heart
• If blood flow is cut completely, that part of the heart muscle begins to die
• Most people do survive their first heart attack but will need to make significant changes to daily lifestyle

STROKE

• Ischemic stroke (most common) happens when a blood vessel that leads to the brain is blocked
  • Brain cells die when the blood supply to part of the brain is cut
  • Results in the inability to carry out daily activities such as walking or talking

• Hemorrhagic stroke happens when a blood vessel bursts within the brain
  • Uncontrolled hypertension is the most common cause of a hemorrhagic stroke

The best way to verify Cardiovascular Disease is to talk to your physician about your medical history, and a physical exam.
OTHER TYPES OF CARDIOVASCULAR DISEASES

- **Heart failure** (commonly referred to as congestive heart failure) where the heart is not pumping blood as well as it should
- **Arrhythmia** occurs when there is an abnormal rhythm to the heart
  The heart can either beat too slow, too fast, or irregularly
- **Heart valve problems**
  - **Stenosis** - occurs when the heart valves do not open enough to allow adequate blood flow
  - **Regurgitation** - occurs when heart valves allow blood to leak because they do not close properly
  - **Mitral valve prolapse** - occurs when the valve bulges or prolapses back into the upper chamber of the heart

PREVENTION

- **Fact**
  There are 5 major risk factors to cardiovascular disease:
  - High blood pressure, abnormal values for blood lipids, smoking, obesity, and lack of regular physical activity

- **Physical Activity**
  Regular exercise has a favorable effect on many of the risk factors to cardiovascular disease

- **Benefits**
  - Exercise promotes a reduction in weight
  - Helps reduce blood pressure levels
  - Reduces bad cholesterol levels and increases good cholesterol levels
  - Brings an increase in insulin sensitivity

*Continued, moderate exercise is key to decreasing the risk of cardiovascular disease*

Reference:

Myers, J. (2003). Exercise and cardiovascular health. Circulation. DOI: 10.1161/01.CIR.0000048890.59383.8D