10.1: What Is Cardiovascular Disease?

Cardiovascular disease (CVD) generally refers to conditions that involve narrowed or blocked blood vessels. The term is often used interchangeably with heart disease. However, heart disease is just one type of cardiovascular disease. Other types of CVD include stroke, high blood pressure, angina (chest pain), and rheumatic heart disease. This chapter will focus on heart disease and strokes.

Heart Disease

Heart disease is a disorder of the blood vessels that can lead to heart failure. This disorder can be congenital and/or the result of lifestyle. Most people associate heart disease with heart attacks. A heart attack, also known as a myocardial infarction, happens when an artery becomes blocked, preventing oxygen and nutrients from getting to the heart. When a person is experiencing a heart attack, they will have crushing chest pains, profound shortness of breath, left arm pain, radiating jaw pain or middle back pain. These signs and symptoms indicate that a person should seek immediate medical assistance.

Click on the link below for more information about how to recognize and respond to a heart attack victim:

- Recognizing and Responding to a Heart Attack

Other types of heart disease include:

- Coronary artery disease: damage or disease in the heart’s major blood vessels
- High blood pressure: A condition in which the force of the blood against the artery walls is too high.
- Cardiac Arrest: Sudden, unexpected loss of heart function, breathing, and consciousness.
• Congestive heart failure: A chronic condition in which the heart does not pump blood as well as it should.

• Arrhythmia: Improper beating of the heart, whether irregular, too fast, or too slow.

• Peripheral artery disease: A circulatory condition in which narrowed blood vessels reduce blood flow to the limbs.

• Congenital heart disease: An abnormality in the heart that develops before birth.

Many people believe incorrectly that heart disease can be cured with surgery and medication. This is a myth. Heart disease is a lifelong condition. Although procedures, such as bypass surgery, can increase blood flow to the heart, the arteries remain damaged. Additionally, this condition will steadily worsen without major lifestyle changes.

Combating America’s Number 1 Killer

Heart disease remains the leading cause of death in America, and in most other countries worldwide. However, the death toll from this disease has been declining steadily for decades, falling 60% since its peak in the mid 1960s. In addition, the death rate from stroke, the third most common cause of death, has declined by about 75 percent since the early 1960s (NIH, 2017). The death rates from these diseases have fallen as awareness about the devastating effects of smoking, high cholesterol, high blood pressure, and obesity has increased. Researchers believe that heart disease in America will continue to decline if more people begin to eat healthier diets, exercise more, and stop smoking.

Click on the link below to watch a video about the study in the 1960s that first revealed the root causes of heart disease:

• The Hidden Epidemic: Heart Disease in America

Stroke

Strokes are the fifth leading cause of death and a leading cause of disability in the United States. This type of CVD affects the arteries leading to the brain and blood vessels within the brain. A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or ruptures. When that happens, part of the brain cannot get the blood and oxygen it needs and as a result, brain cells begin to die.

A stroke that occurs as the result of a blockage is called an ischemic stroke. A hemorrhagic stroke is the result of a rupture and accounts for only 20% of all strokes.

The Cincinnati Stroke Scale provides early warning signs of a stroke:

• F = Face: Is one side of the face drooping down?

• A = Arm: Can the person raise both arms, or is one arm weak?

• S = Speech: Is speech slurred or confusing?

• T = Time: If the conditions listed above are present call 9-1-1 immediately! Time is critical!