



# Addressing the Challenges of Non-communicable Diseases: *Cardiovascular Disease*

*“Non-communicable diseases have emerged as growing health problems for countries in every corner of the globe.”  
- U.S. Secretary of Health and Human Services Kathleen Sebelius*

## GLOBAL BURDEN

Cardiovascular disease is the number one cause of death around the world. In 2004, approximately 17.1 million people (representing nearly 30% of global mortality) died of cardiovascular disease. Coronary heart disease and stroke are the deadliest forms of cardiovascular disease for both men and women. Low- and middle-income countries are disproportionately affected in that 82% of cardiovascular deaths occur in these areas. It is projected that by 2030, 23.6 million people will die each year from cardiovascular disease.

## WHAT IS CARDIOVASCULAR DISEASE?

Cardiovascular disease is a non-communicable disease that impacts the heart and blood vessels. It occurs when plaque builds up in the arteries, a process called atherosclerosis. When this happens, the arteries can narrow over time, reducing blood flow to the heart, or rupture causing a heart attack. Heart attacks can cause significant damage to the heart muscle. Over time, the heart muscle can be weakened and lead to heart failure, a serious condition where the heart can't pump blood the way that it should.

Stroke is a type of cardiovascular disease that occurs when blood flow to a portion of the brain is blocked, often causing significant damage to the brain. Sudden bleeding from an aneurysm, or weakness in the wall of an artery, can also cause a stroke. People may be born with aneurysms or develop them over time.

### **Major cardiovascular disease risk factors:**

- *Tobacco usage*
- *Physical inactivity*
- *Unhealthy diet*
- *Overweight/Obesity*
- *Diabetes*
- *High blood pressure*
- *High blood cholesterol*
- *Excessive alcohol use*

## RISK FACTORS

High blood pressure, high cholesterol, and diabetes significantly increase the risk that someone will develop cardiovascular disease, heart attack, and stroke. Tobacco use, physical inactivity, an unhealthy diet, and excessive alcohol consumption all increase the risk of having heart disease by placing undue stress on the cardiovascular system. Advanced age and family history are also risk factors for developing cardiovascular disease.

## SYMPTOMS AND TREATMENT

Cardiovascular disease can often lead to life-threatening medical emergencies. The symptoms vary depending on the type of heart disease. For many people, chest discomfort or a heart attack is the first sign. Shortness of breath, weakness, pain in the upper body are also common signs. Symptoms of stroke include numbness in certain parts of the body and inability to speak normally. Strokes and heart attacks are life-threatening conditions that require immediate medical attention.

Medications such as statins for high cholesterol, antihypertensive agents, and medical procedures such as angioplasty play a large role in the treatment of cardiovascular disease. To help patients manage cardiovascular disease, cardiologists and other health care providers typically recommend regular blood pressure checkups and lifestyle modifications, such as maintaining a healthy weight.