

HEART DISEASE AND DIABETES

Factsheet | HGIC 4387 | **Published:** May 19, 2021

The term ‘heart disease’ encompasses several different health problems. These conditions include blood vessel diseases (such as coronary artery disease), heart rhythm problems, heart defects from birth, heart valve disease, and disease of the heart muscle.

According to the Centers for Disease Control and Prevention, heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups, including African American, American Indian, Alaska Native, Hispanic, and white men, in the United States. More than 650,000 Americans die from heart disease each, which equates to 1 in every 4 deaths.

Causes

Heart disease can occur for a variety of reasons. Behaviors such as tobacco use, unhealthy diet, obesity, physical inactivity, and overuse of alcohol can cause damage to the arteries and blood vessels in the heart. Your body tries to heal the arteries by covering the damaged places with cholesterol deposits called plaque. When plaque starts to build up, it blocks important nutrients from getting to the heart and leads to heart disease.

Complications of Heart Disease

Heart failure: Heart failure occurs when the heart can’t pump enough blood to meet the body’s needs. This is one of the most common complications of heart disease.

Heart attack: This is when a blood clot forms, gets caught in areas where plaque has built up, and blocks the blood flow through a blood vessel that feeds the heart. This can lead to severe damage of the heart muscle.

Stroke: This is when the arteries to your brain are narrowed or blocked, which can cause less blood to reach your brain. Due to the blood supply being temporarily blocked or cut off, brain cells are deprived of oxygen, and severe damage can occur.

Aneurysm: This is when a bulge forms in a weakened area of an artery wall. It can occur anywhere in the body, and life-threatening internal bleeding will occur if the aneurysm bursts.

Peripheral artery disease: This is when the legs or feet do not receive enough blood flow, which can cause leg pain when walking.

Sudden cardiac arrest: This is when there is a sudden, unexpected loss of heart function, breathing, and consciousness.

Diabetes and Heart Disease

People living with either type 1 or type 2 diabetes are at increased risk for heart disease. According to the American Heart Association (AHA), adults with diabetes are two to four times more likely to die from heart disease than adults without diabetes. The AHA also considers diabetes to be one of the seven

controllable risk factors for cardiovascular disease. Cardiovascular complications are the leading cause of premature death in people with either type 1 or type 2 diabetes.

People living with diabetes are more likely to have certain conditions that may increase their chances of having heart disease. Examples of these other factors include:

- High blood pressure (hypertension)
- Abnormal cholesterol
- Obesity
- Smoking
- Lack of physical activity
- Poorly controlled blood sugar

How Can I Lower My Chances Of Heart Disease If I Have Diabetes?

Your chances of developing heart disease only increase the longer you have diabetes, but by managing your risk factors, you may be able to avoid or delay the development of heart and blood vessel disease. Managing your diabetes and working to reduce your risk of heart disease are not separate goals — they are closely linked. Good ways to lower your risk of heart disease include:

Follow a heart-healthy eating plan: This includes vegetables and fruits, beans or other legumes, lean meats and fish, low-fat or fat-free dairy foods, whole grains, and healthy fats.

Get plenty of physical activity: It is recommended to complete 150 minutes per week of moderate aerobic exercise. Even just ten minutes of moving can count towards the total with activities such as taking the stairs and walking the dog.

Stay at or get to a healthy weight: Reducing your weight by just a small amount (2%) can help decrease certain fats in your blood and lower your blood sugar. Losing even more (5%) helps lower your blood pressure and blood cholesterol level.

Get enough sleep (8 hours a night): Not getting good quality sleep increases your risk of obesity, high blood pressure, heart attack, and depression.

Avoid smoking: Don't smoke and avoid secondhand smoke since both can be extremely detrimental to heart health. The chemicals in tobacco damage the heart and blood vessels, and cigarette smoke reduces the oxygen in your blood, which increases your blood pressure and heart rate.

Manage stress: Excessive stress can lead to unhealthy coping mechanisms such as overeating or smoking. Reduce stress and improve health with physical activity, relaxation exercises, or meditation.

Manage your ABCs

- **A:** Get a regular *A1C* test (a blood test that tells how controlled your blood sugar has been) and aim to stay in your target range
- **B:** Try to keep your *blood pressure* in the target range your doctor sets
- **C:** Manage your *cholesterol* levels.
- **s:** Stop *smoking* or don't start.

Free Resources to Learn More

Know Diabetes By Heart is a free, one-hour education session offered online by Clemson Extension Service. This program is designed to help participants better understand the link between diabetes and heart disease. Participants will learn about risks related to diabetes and heart disease, how to take control of the risks, and available community and clinical resources. Register for Know Diabetes By Heart [here](#).

Health Extension for Diabetes (HED) is an education and support program offering group and individual sessions for people diagnosed with type 1 or type 2 diabetes. This program is recognized by the American Diabetes Association as a practice-tested diabetes support program and helps participants improve their health. The program is a series of 16 one-hour sessions that are currently being offered online by Zoom. Participants are provided education, resources, and support needed to better manage diabetes. Session topics include healthy eating, physical activity, managing stress, medications and monitoring, and more. Learn more about joining Health Extension for Diabetes [here](#) or contact Danielle McFall at 864-656-8627 or at dem@g.clemson.edu.

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Originally published 05/21

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