Community and Clinical Connections for Prevention & Health Branch | North Carolina DHHS | Division of Public Health

## What is heart disease?

Heart disease, also known as cardiovascular disease, is a term used to describe all the abnormal conditions that affect the heart and blood vessels. This includes conditions such as coronary artery disease (CAD), myocardial infarction (commonly known as heart attack), peripheral artery disease (PAD) and heart failure, among many other conditions.

- Coronary artery disease is the most common type of heart disease and occurs when plaque builds up in the coronary arteries, blood vessels that carry blood to the heart muscles.
- · A heart attack occurs when plaque completely blocks one or more coronary arteries. A heart attack is a medical emergency.
- · Peripheral artery disease is a narrowing of the peripheral arteries of the legs, stomach, arms and head.
- · Heart failure is another common type of heart disease that occurs when the heart muscle is weakened and cannot pump oxygen-rich blood with enough force to reach all the organs of the body.

# How many people are affected by heart disease?

Heart disease is the leading cause of death in the United States and the leading cause of death in North Carolina (NC).1,2

caused by heart disease in NC in 2022

deaths every hour

In 2023, 10% of NC adults reported that they have a history of any cardiovascular disease (including heart attack, coronary heart disease, or stroke).3

In 2022, heart disease led to

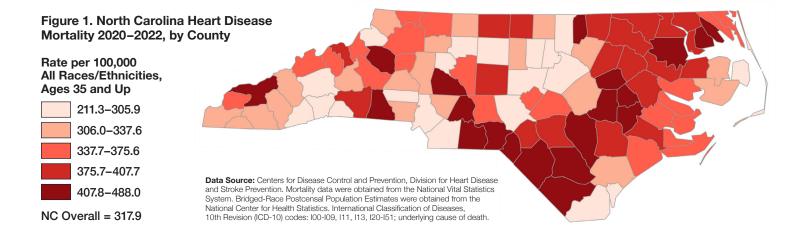
102,427 hospital discharges & \$7.3 billion in hospital charges in NC4

1 almost every 5 minutes

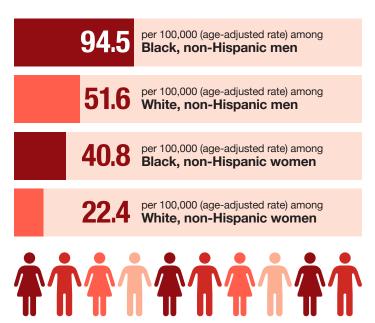
over \$20 million each day

#### Disparities, inequality and inequity in the burden of heart disease

- North Carolina has the 25th highest age-adjusted heart disease death rate among the 50 states and Washington, D.C.5
- The eastern counties of NC tend to have a higher burden of heart disease (e.g., death and hospitalization rates) compared to the rest of the state. However, as evident in Figure 1, high rates of heart disease mortality also exist in some southern and western counties.

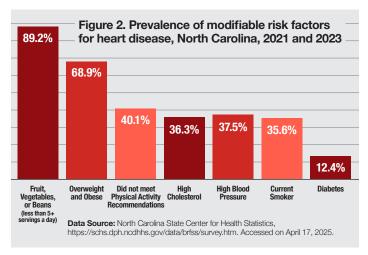


- Nationally in 2023, Black/African American people have higher age-adjusted heart disease death rates compared to White people (200 per 100,000 vs 163.3 per 100,000).<sup>6</sup>
- Non-Hispanic Black men and women in North Carolina are more likely to die from heart disease and at younger ages compared to white non-Hispanic North Carolinians. In 2023, the rate of heart disease deaths occurring before age 65 by race/ethnicity and gender were as follows:<sup>7</sup>



# What are the risk factors for heart disease?

- There are several risk factors for heart and blood vessel disease. Some factors can be controlled, others cannot.
- Risk factors that cannot be controlled include age, gender, genetics and family history.
- Other risk factors that can be controlled include high blood pressure, high blood lipids (mainly LDL cholesterol), diabetes, smoking, overweight, obesity, unhealthy diet and physical inactivity, excessive alcohol use.



# How can heart disease be prevented?

Adopting a healthy lifestyle and managing risk factors can reduce the risk of developing heart disease. Visit heart.org/en/healthy-living/healthy-lifestyle to learn more about key behaviors.

A combination of lifestyle measures and medications may be necessary to control medical conditions that increase the risk of heart disease, such as high blood pressure, diabetes and high blood cholesterol. For fact sheets about hypertension, diabetes and obesity in North Carolina visit **communityclinicalconnections.com**.

#### Healthy lifestyle practices that help reduce the risk of heart disease include:



Maintaining a healthy weight or losing weight (for those who are overweight or obese). For information on achieving a healthy weight, please visit esmmweighless.com.



Regular physical activity and healthy eating (including reducing sodium intake). For general information on physical activity and healthy eating please visit myeatsmart movemore.com.



Avoiding tobacco products and secondhand smoke for non-smokers and quitting for current smokers. For general information about smoking and how to get help quitting, please visit quitlinenc.com or call 1-800-QUIT-NOW (1-800-784-8669).



Limiting alcohol consumption. Men should have no more than two drinks per day, and women should have no more than one. For more information, visit cdc.gov/alcohol.



Working with your health care team to manage diabetes. For information on diabetes, please visit DiabetesNC.com.

## What are the symptoms of heart disease?

The symptoms of heart disease vary and depend on the specific condition.

#### Heart attack symptoms in women and men





Chest pain or discomfort





Shortness of breath





Pain or discomfort in the jaw, neck, back, arm, or shoulder



Feeling nauseated, light-headed, or unusually tired

Over half of individuals who die suddenly from coronary heart disease, including heart attack, have had no previous symptoms. Absence of the above symptoms does not necessarily mean absence of risk for heart attack. To learn more about the signs and symptoms of heart attack visit heart.org/en/health-topics/heart-attack/warning-signs-ofa-heart-attack.

#### Common symptoms of heart failure include:

- · Shortness of breath during daily activities.
- · Having trouble breathing when lying down.
- · Weight gain with swelling in the feet, legs, ankles or stomach.
- · Generally feeling tired or weak.

Peripheral arterial disease (PAD) is the narrowing or blockage of vessels that carry blood from the heart to extremities. It occurs more commonly in the legs than arms.

· The most common symptoms of PAD are cramping, pain, or tiredness in the leg or hip muscles while walking or climbing stairs.

#### What are the treatment options for heart disease?

Treatment for heart disease depends on the specific condition.

#### Regarding heart attack:

- -It is important to know the symptoms of heart attack and to immediately call 911 if you think you or someone else may be having a heart attack. The chance of survival, chance of recovery and degree of lasting disability are affected by the time lapse between the onset of heart attack symptoms and the start of treatment.
- -Most North Carolina adults, 90%, say the first thing they would do if they thought someone was having a heart attack is to call 911, however in 2014 only 14% of adults surveyed actually knew all the signs and symptoms of a heart attack.<sup>8,9</sup> This means a majority of North Carolinians may not be able to identify a heart attack when it occurs. To learn more about the signs and symptoms of a heart attack, visit heart.org/en/health-topics/heart-attack/ warning-signs-of-a-heart-attack.
- -Treatment for a heart attack generally involves advanced medical and surgical procedures to restore blood flow to the heart muscle.
- For heart failure, medications and sodium reduction are the cornerstones of treatment.
- For PAD, quitting smoking and other lifestyle changes, exercise and medications may slow the progression or even reverse the symptoms.
- In addition to specific treatment procedures for a given condition, lifestyle changes and medical treatment of risk factors are major components of the treatment of heart disease.

1. National Center for Health Statistics. 2022 Leading Causes of Death. Centers for Disease Control. Retrieved on April 7, 2025, from https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm.

2. North Carolina Division of Public Health State Center for Health Statistics. 2022 Vital Statistics Volume 2 Table A: Leading Causes of Death by Age Group North Carolina Residents. NC Department of Health and Human Services. Retrieved on April 7, 2025, from https://schs.dph.ncdhhs.gov/data/vital/lcd/2022/docs/2022-TableA-LCDbyAge.pdf.

3. North Carolina Division of Public Health State Center for Health Statistics, 2023 Behavioral Risk Factor Surveillance System (BRFSS). NC Department of Health and Human Services. Retrieved on March 20, 2025, from https://schs.dph.ncdhhs.gov/data/brfss/2023/.

4. North Carolina Division of Public Health State Center for Health Statistics, (2024). Inpatient Hospital Utilization and Charges by Principal Diagnosis. Data produced on request on January 31, 2024. ICD-10 codes: Heart Disease (100-109, 111, 113, 120-151). Data includes only NC residents served in NC hospitals.

5. National Center for Health Statistics. 2022 Heart Disease Mortality by State. Centers for Disease Control. Retrieved on April 8, 2025, from https://www.cdc.gov/nchs/pressroom/sosmap/heart\_ disease mortality/heart disease.htm

6. National Center for Health Statistics Division of Vital Statistics Mortality Statistics Branch, 2018-2023 CDC WONDER: Underlying Cause of Death Data. Centers for Disease Control and Prevention. Retrieved on April 8, 2025, from https://wonder.cdc.gov/ucd-icd10-expanded.html. ICD-10 codes: Heart Disease (100-109, 111, 113, 120-151).

7. North Carolina Division of Public Health State Center for Health Statistics. 2022 Vital Statistics Volume 2 Table B: Leading Causes of Death by Race North Carolina Residents. NC Department of Health and Human Services. Accessed at https://schs.dph.ncdhhs.gov/data/vital/lcd/2022/ docs/2022-TableB-LCDbyRace.pdf on April 8, 2025.

8. North Carolina Division of Public Health State Center for Health Statistics. 2022 Behavioral Risk  ${\it Factor Surveillance System (BRFSS)}. \ NC \ Department of Health and Human Services, Retrieved on March 20, 2025, from https://schs.dph.ncdhhs.gov/data/brfss/2022/.$ 

9. North Carolina Division of Public Health State Center for Health Statistics. 2014 Behavioral Risk Factor Surveillance System (BRFSS). Department of Health and Human Services, Retrieved on December 13, 2018, from https://schs.dph.ncdhhs.gov/data/brfss/2014/nc/all/topics.htm.

In addition to the above references, this fact sheet was developed with heavy reliance on information from the Centers for Disease Control and Prevention website: https://www.cdc.gov/heart-disease/ index.html



This fact sheet was produced by the Community and Clinical Connections for Prevention and Health Branch, Chronic Disease and Injury Section, Division of Public Health, N.C. Department of Health and Human Services. If you have any questions about data used in this fact sheet or about heart and blood vessel disease prevention and management efforts in North Carolina, please email contact@communitvclinicalconnections.com.

For more information on the Community and Clinical Connections for Prevention and Health Branch, please visit communityclinicalconnections.com.