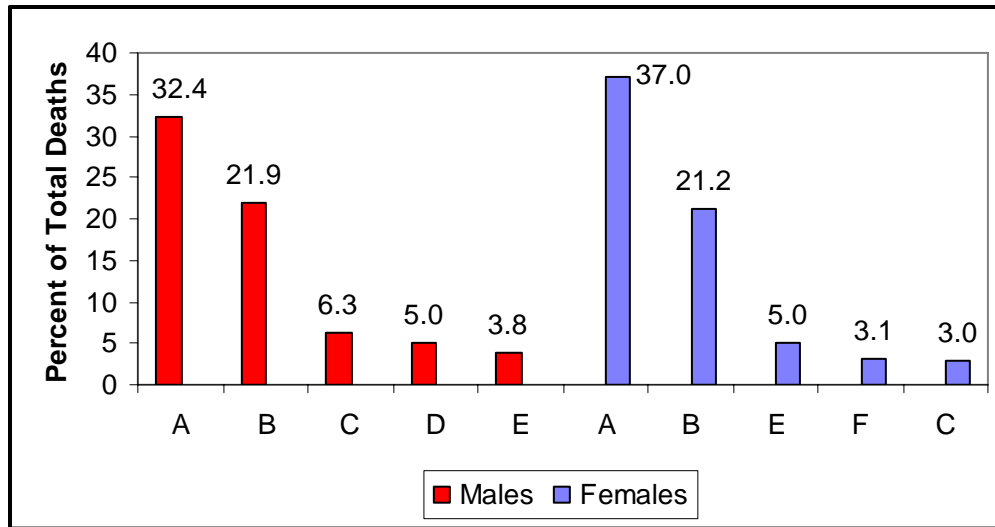


Statistical Fact Sheet — Populations
2009 Update

African Americans and Cardiovascular Diseases — Statistics

Leading Causes of Death for Black or African-American Males and Females

United States: 2005



Note: A, Total CVD; B, cancer; C, accidents; D, assault (homicide); E, diabetes mellitus; F, nephritis, nephrotic syndrome and nephrosis. Using the combined “Diseases of the Heart” and “Stroke” category, which does not constitute total CVD, the percentage was 29.4 for males and 33.3 for females. Source: *NCHS*

Cardiovascular Disease (CVD) (ICD/10 codes I00-I99, Q20-Q28) (ICD/9 codes 390-459, 745-747)

- Among non-Hispanic blacks age 20 and older, the following have CVD:
 - 45.9 percent of men.
 - 45.9 percent of women.
 (*NHANES [2005-06], NCHS and NHLBI*)
- In 2005, CVD caused the deaths of
 - 47,384 black males.
 - 52,401 black females.
- The 2005 overall death rate from CVD was 278.9. Death rates for blacks were
 - 438.4 for males.
 - 319.7 for females.

Coronary Heart Disease (CHD) (ICD/10 codes I20-I25) (ICD/9 codes 410-414, 429.2)

- Among non-Hispanic blacks age 20 and older, the following have CHD:
 - 9.6 percent of men.
 - 9.0 percent of women.
 (*NHANES [2005-06], NCHS and NHLBI*)

- Among non-Hispanic blacks age 20 and older, the following have myocardial infarction:
 - 5.1 percent of men.
 - 2.2 percent of women.

(NHANES [2005-06], NCHS and NHLBI)

- Based on data from the ARIC studies of the NHLBI: The average age-adjusted incidence rates per 1,000 person-years in blacks are
 - 10.6 for men.
 - 5.1 for women.

Incidence rates excluding revascularization procedures are

- 9.2 for men.
- 4.9 for women.

- Diabetes is a weaker predictor of CHD in blacks than in whites. *(Arch Intern Med. 2002;162:2565-71)*
- In 2005, mortality showed that CHD caused the deaths of
 - 22,933 black males.
 - 23,094 black females.
- The 2005 overall CHD death rate was 144.4. Death rates for blacks were
 - 213.9 for males.
 - 140.9 for females.
- In 2005 mortality showed that myocardial infarction (heart attack) caused the deaths of 7,527 black males and 8,009 black females.

Angina Pectoris (ICD/10 code I20) (ICD/9 code 413)

- Angina (chest pain or discomfort caused by reduced blood supply to the heart muscle) is more common in women than in men. Among non-Hispanic blacks age 20 and older,
 - 4.4 percent of men have angina.
 - 6.7 percent of women have angina.

(NHANES [2005-06], NCHS and NHLBI)

- The annual rates per 1,000 population of new episodes of angina for black men are
 - 22.4 for ages 65–74
 - 33.8 for ages 75–84
 - 39.5 for age 85 and older.

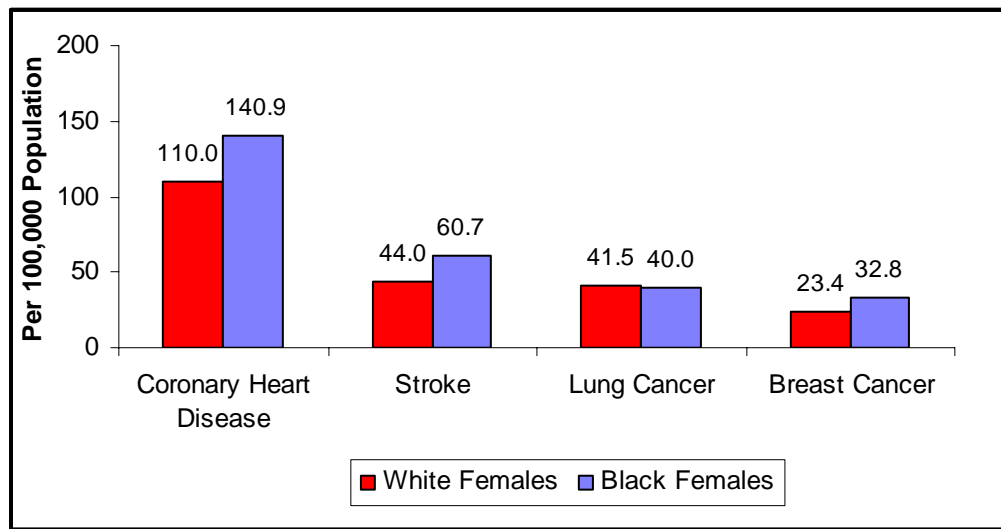
For black women the rates are

- 15.3 for ages 65–74
- 23.6 for ages 75–84
- 35.9 for age 85 and older

(CHS, NHLBI)

Age-Adjusted Death Rates for Coronary Heart Disease, Stroke, and Lung and Breast Cancer for White and Black Females

United States: 2005



Source: NCHS

Stroke (ICD/10 codes I60-I69) (ICD/9 codes 430-438)

- Among non-Hispanic blacks age 20 and older, the following have had a stroke:
 - 3.9 percent of men.
 - 4.1 percent of women.

(NHANES [2005-06], NCHS and NHLBI)
- Blacks have a risk of first-ever stroke that is almost twice that of whites. The age-adjusted stroke incidence rates in those 45 to 84 years of age are 6.6 per 1,000 population in black males, 3.6 in white males, 4.9 in black females, and 2.3 in white females (ARIC). On the basis of 1987–2001 data from the ARIC study of the NHLBI, stroke/TIA incidence rates (per 1,000 person-years) are 9.7 for black males ages 45 to 54, 13.1 for those ages 55 to 64, and 12.2 for those ages 65 to 74. For black women in the same age groups, the rates are 7.2, 10.0, and 15.0, respectively. (NHLBI. *Incidence & Prevalence: 2006 Chart Book on Cardiovascular and Lung Diseases*)
- In 2005 stroke caused the deaths of
 - 7,519 black males.
 - 10,022 black females.
- The 2005 overall death rate for stroke was 46.6. Death rates for blacks were
 - 70.5 for males.
 - 60.7 for females.

High Blood Pressure (HBP) (ICD/10 codes I10-I15) (ICD/9 codes 401-404)

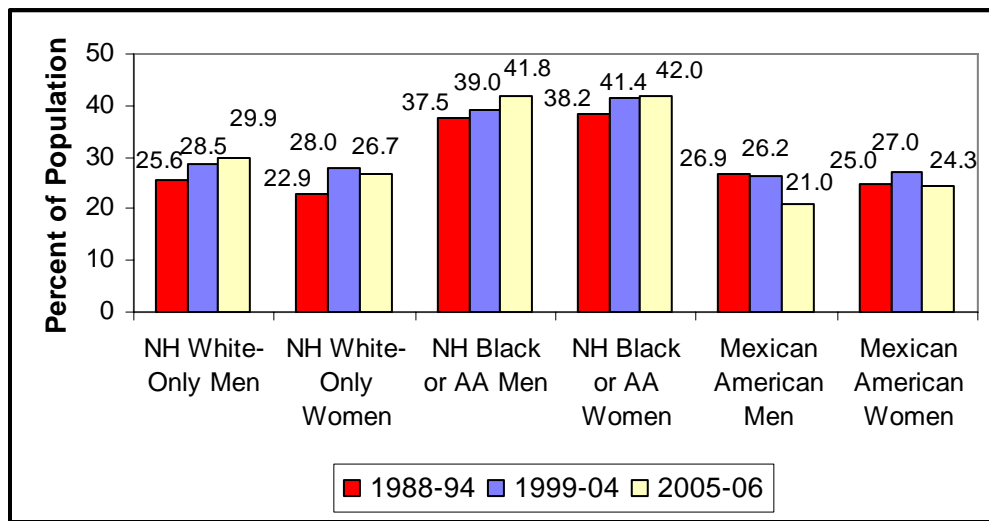
- Data from the NHLBI's ARIC study found that hypertension was a particularly powerful risk factor for CHD in black persons, especially in black women.
- Among non-Hispanic blacks age 20 and older, the following have HBP (defined as systolic pressure of 140 mm Hg or higher or diastolic pressure of 90 mm Hg or higher, or taking antihypertensive medicine or being told twice by a physician or other professional that you have hypertension):
 - 44.4 percent of men.
 - 43.9 percent of women.

(NHANES [2005-06], NCHS, and NHLBI)

- 2005 mortality data showed that HBP caused the deaths of
 - 6,019 black males.
 - 6,746 black females.
- The 2005 overall death rate from HBP was 18.4. Death rates for blacks were
 - 52.1 for males.
 - 40.3 for females.

Age-Adjusted Prevalence Trends for High Blood Pressure in Americans Age 20 and Older by Race/Ethnicity, Sex and Survey

NHANES: 1988–94, 1999–2004 and 2005-06



Source: NCHS and NHLBI.

End-Stage Renal Disease (ESRD) (ICD/10 code N18.0)

- The median age of the prevalent population is 57.9 years. For blacks it is 56.3 years. (*USRDS 2007 Annual Data Report. NIH, NIDDK*)
- ESRD attributed to diabetes or hypertension decreased for American Indians/ Alaska Natives and Asian/Pacific Islanders but not for whites or blacks during 1999–2004. (*MMWR Morb Mortal Wkly Rep. 2007; 56:253–256.*)
- Blacks and Native Americans have much higher rates of ESRD than whites and Asians. Blacks represent nearly 29 percent of treated ESRD patients. (*USRDS 2007 Annual Data Report, NIH, NIDDK*)

Congenital Cardiovascular Defects (ICD/10 codes Q20-Q28) (ICD/9 codes 745-747)

- The 2005 overall death rate for congenital cardiovascular defects was 1.2. Death rates for blacks were
 - 1.4 for males.
 - 1.4 for females.
- 2005 crude infant death rates (under 1 year) were
 - 39.0 for white infants.
 - 47.7 for black infants.

Heart Failure (HF) (ICD/10 code I50.0) (ICD/9 code 428.0)

- Among non-Hispanic blacks age 20 and older, the following have HF:
 - 4.2 percent of men.
 - 4.2 percent of women.(*NHANES [2005-06], NCHS and NHLBI*)
- The annual rates per 1,000 population of new HF events for black men are
 - 16.9 for ages 65–74.
 - 25.5 for ages 75–84.
 - 50.6* for age 85 and older.For black women the rates are
 - 14.2 for ages 65–74.
 - 25.5 for ages 75–84.
 - 44.0* for age 85 and older.(*CHS, NHLBI*) *Unreliable estimate.
- 2005 total mention mortality data showed that HF caused the deaths of
 - 11,235 black males.
 - 14,928 black females.
- The 2005 overall total mention mortality death rate from HF was 52.3. Death rates for blacks were
 - 81.9 for males.
 - 58.7 for females.

Rheumatic Fever/Rheumatic Heart Disease (RF/RHD) (ICD/10 codes I00-109)
(ICD/9 codes 390-398)

- The incidence of rheumatic fever remains higher in African Americans, Puerto Ricans, Mexican Americans and American Indians. (*Hurst W. The Heart, Arteries and Veins. 10th ed. New York: NY: McGraw-Hill, 2001*)
- 2005 mortality data showed that rheumatic fever and rheumatic heart disease caused the deaths of
 - 81 black males.
 - 146 black females.
- The 2005 overall death rate from RF/RHD was 1.1. Death rates for blacks were
 - 0.7 for males.
 - 0.8 for females.

Venous Thromboembolism (VTE)

- Caucasians and African Americans have a significantly higher incidence of VTE than Hispanics and Asian/Pacific Islanders. (*White RH, et al. The epidemiology of venous thromboembolism. Circulation 2003;107[Suppl. 1]:14-18*)

Pulmonary Embolism

- A study of Medicare recipients age 65 and older reported 30-day case fatality rates in patients with pulmonary embolism. Overall, blacks had higher fatality rates than whites (16.1 percent vs. 12.9 percent). (*Goldhaber SZ. Pulmonary embolism. NEJM 1998;339:93-104*)

Tobacco

- In 2006, among blacks age 18 and older,
 - 26.1 percent of men smoke.
 - 18.5 percent of women smoke. (*MMWR Morb Mortal Wkly Rep 2007;56:1157-61*)

High Blood Cholesterol and Other Lipids

- In adults, total cholesterol levels of 240 mg/dL or higher are considered high risk. Levels from 200 to 239 mg/dL are considered borderline-high risk.
- Among non-Hispanic blacks age 20 and older, the following have total blood cholesterol levels of 200 mg/dL or higher:
 - 35.6 percent of men.
 - 41.4 percent of women.
- Among non-Hispanic blacks, the following have levels of 240 mg/dL or higher:
 - 7.9 percent of men.
 - 13.4 percent of women (*NHANES 2005-06 NCHS and NHLBI*)
- Among non-Hispanic blacks age 20 and older, the following have LDL cholesterol of 130 mg/dL or higher:
 - 36.2 percent of men.
 - 27.4 percent of women.

Low-density lipoprotein (LDL or bad) cholesterol levels of 130–159 mg/dL are considered borderline high. Levels of 160–189 mg/dL are classified as high, and levels of 190 mg/dL or higher are very high. Estimates are age-adjusted. (*NHANES [2005-06], NCHS*)

- Among non-Hispanic blacks age 20 and older, the following have HDL cholesterol less than 40 mg/dL:
 - 13.5 percent of men.
 - 6.1 percent of women.

(NHANES [2005-06], NCHS)

Physical Inactivity

- 22.9 percent of non-Hispanic blacks age 18 and older, report regular leisure-time physical activity. (National Center for Health Statistics. Early Release of Selected Estimates Based on Data From the 2007 National Health Interview Survey. Released 6-25-08; <http://www.cdc.gov/nchs/about/major/nhis/released200806.htm>)

Overweight and Obesity

- Among non-Hispanic black adults age 20 and older, the following are overweight or obese (BMI of 25.0 kg/m² and higher):
 - 73.7 percent of men.
 - 77.7 percent of women.

Of these, the following are obese (BMI of 30.0 kg/m² and higher):

- 36.8 percent of men.
- 52.9 percent of women.

(NHANES 2005-06 National Center for Health Statistics. Health, United States, 2006. Unpublished data. NCHS and NHLBI.)

Diabetes Mellitus (ICD/10 codes E10-E14) (ICD/9 code 250)

- In the total population age 20 and older, 7.4 percent of men and 8.0 percent of women have physician-diagnosed diabetes. Among non-Hispanic blacks the prevalences are
 - 14.9 percent of men.
 - 13.1 percent of women.

(NHANES 2003-06. NCHS and NHLBI)
- In the total population age 20 and older, 3.8 percent of men and 2.1 percent of women have undiagnosed diabetes, using American Diabetes Association criteria of fasting plasma glucose of 126 mg/dL or more. Among non-Hispanic blacks the prevalences are
 - 4.7 percent of men.
 - 3.1 percent of women

(NHANES 2003-06. NCHS and NHLBI)
- In the total population age 20 and older, 31.7 percent of men and 19.9 percent of women have pre-diabetes, using American Diabetes Association criteria of fasting plasma glucose of 100 to less than 126 mg/dL. Among non-Hispanic blacks the prevalences are
 - 22.9 percent of men.
 - 19.0 percent of women.
- In 2005 mortality for diabetes mellitus was
 - 5,730 black males.
 - 7,240 black females.
- The 2005 overall death rate from diabetes mellitus was 24.6. Death rates for blacks were

- 50.8 for males.
- 43.8 for females.
- Between NHANES III 1988–94 (NCHS) and NHANES 1999–2002, considerable differences were found among ethnic groups in glycemetic control rates among adults with type 2 diabetes. For non-Hispanic blacks the rates were 41.2 and 36.5. (*Fan T, Koro CE, Fedder DO, Bowlin SJ. Ethnic disparities and trends in glycemetic control among adults with type 2 diabetes in the U.S. from 1988 to 2002. Diabetes Care. 2006; 29: 1924–1925e.*)

Metabolic Syndrome

- The prevalence of blacks with the metabolic syndrome are
 - 24.5 percent of men.
 - 36.4 percent of women.

(*Grundy SM, Brewer HB Jr, Cleeman JI, Smith SC Jr, Lenfant C; American Heart Association; National Heart, Lung, and Blood Institute. Definition of metabolic syndrome: Report of the National Heart, Lung, and Blood Institute/American Heart Association conference on scientific issues related to definition. Circulation. 2004;109:433-8.*)

Abbreviations Used :

ARIC – Atherosclerosis Risk in Communities
BMI – body mass index
CDC – Centers for Disease Control and Prevention
CHS – Cardiovascular Health Study
ESRD – End Stage Renal Disease
kg/m² – kilograms/meter²
mg/dL – milligrams per deciliter
LDL – low density lipoprotein
HDL – high-density lipoprotein.
MMWR – *Morbidity and Mortality Weekly Report*
NCHS – National Center for Health Statistics
NIH – National Institutes of Health
NIDDK – National Institute of Diabetes and Digestive and Kidney Diseases
NH – non-Hispanic
NHANES – National Health and Nutrition Examination Survey
NHLBI – National Heart, Lung, and Blood Institute
USRDS – U.S. Renal Data System

For additional information, tables and charts, see the Heart Disease and Stroke Statistics – 2009 Update, published in *Circulation* and available on our Web site.