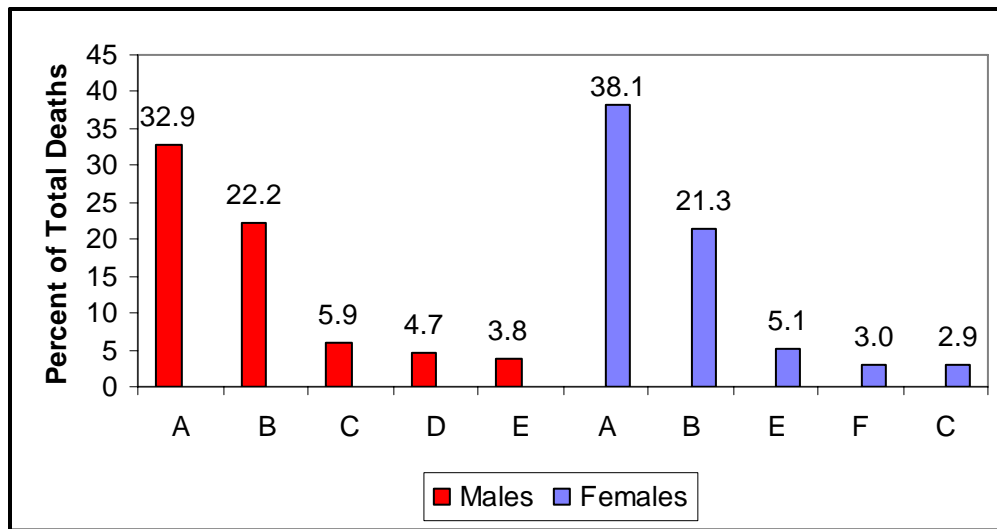


Statistical Fact Sheet — Populations
2008 Update

African Americans and Cardiovascular Diseases — Statistics

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

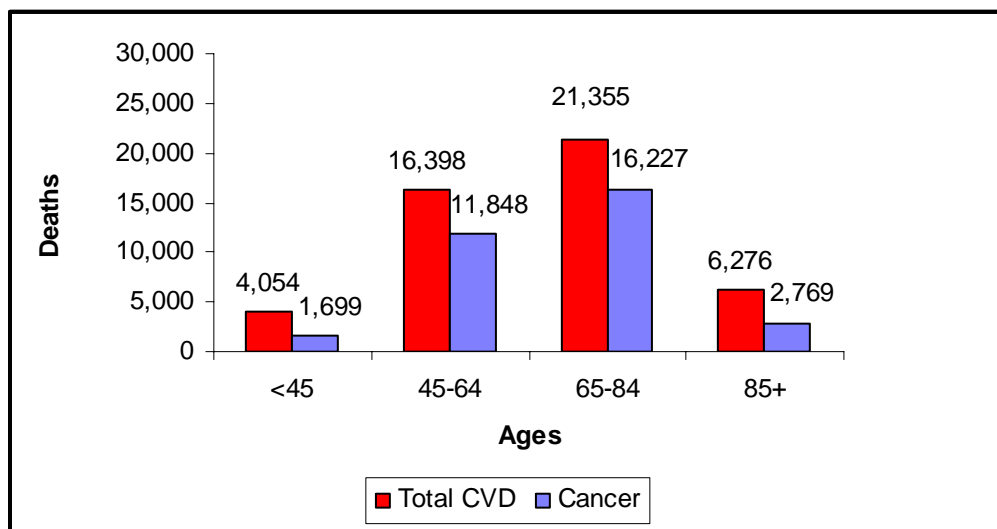
United States: 2004



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 30.1 for males and 34.3 for females. Source: *NCHS*

Deaths From Cardiovascular Diseases and Cancer for Black Males by Age

United States: 2004

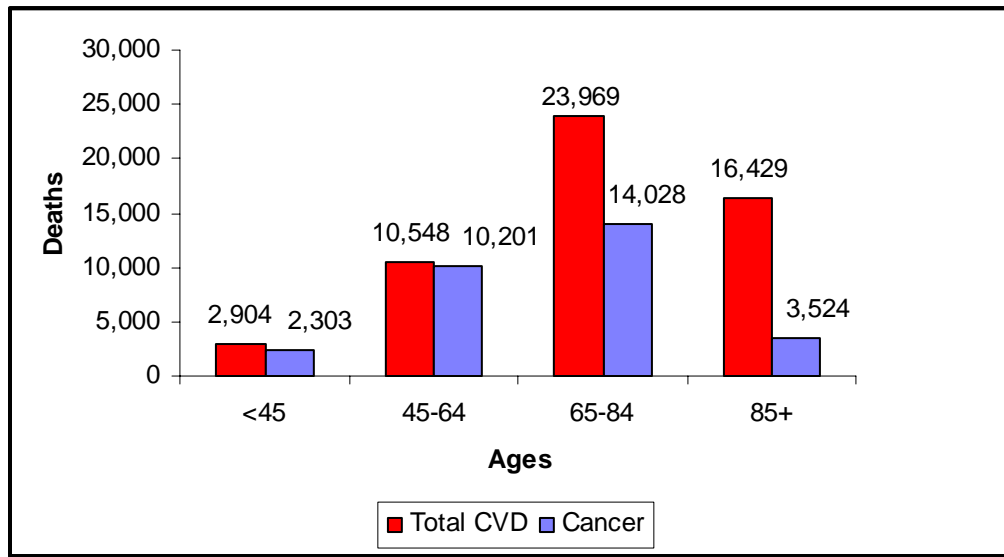


Note: Total CVD = Cardiovascular diseases and congenital cardiovascular defects.

Source: *NCHS*

Deaths From Cardiovascular Diseases and Cancer for Black Females by Age

United States: 2004



Note: Total CVD = Cardiovascular diseases and congenital cardiovascular defects. U.S. government agencies and population surveys use the terms “blacks” and “non-Hispanic blacks.” Death rates are age-adjusted per 100,000 population, based on the 2000 U.S. standard. Some data are reported according to ICD/9 codes and some use ICD/10 codes.

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:
 - 44.6 percent of men.
 - 49.0 percent of women.

(NHANES [1999-2004], NCHS and NHLBI)
- In 2004, CVD mortality caused the deaths of
 - 48,083 black males.
 - 53,850 black females.
- The 2004 overall death rate from CVD was 288.0. Death rates for blacks were
 - 454.0 for males.
 - 333.6 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:
 - 7.1 percent of men.
 - 7.8 percent of women.

(NHANES [1999-2004], NCHS and NHLBI)
- Among non-Hispanic blacks age 20 and older, the following have myocardial infarction:
 - 3.9 percent of men.
 - 3.3 percent of women.

(NHANES [1999-2004], NCHS and NHLBI)

Based on data from the ARIC study 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. *(Jones DW, et al. Risk factors for coronary heart disease in African Americans: the Atherosclerotic Risk in Communities Study 1987-1997. Arch Intern Med 2002;162:2565-71)*
- The annual age-adjusted rates per 1000 population of first MI, 1987 to 2001, in ARIC Surveillance were 4.2 in black men and 2.8 in black women. *(NHLBI Incidence & Prevalence: 2006 Chart Book on Cardiovascular and Lung Diseases.)* In 2004, mortality showed that CHD caused the deaths of
 - 23,060 black males.
 - 23,635 black females.
- The 2004 overall CHD death rate was 150.5. Death rates for blacks were
 - 222.2 for males.
 - 148.6 for females.
- In 2004 mortality showed that myocardial infarction (heart attack) caused the deaths of 7,811 black males and 8,395 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,
 - 3.4 percent of men have angina.
 - 4.3 percent of women have angina.

(NHANES [1999-2004], 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.

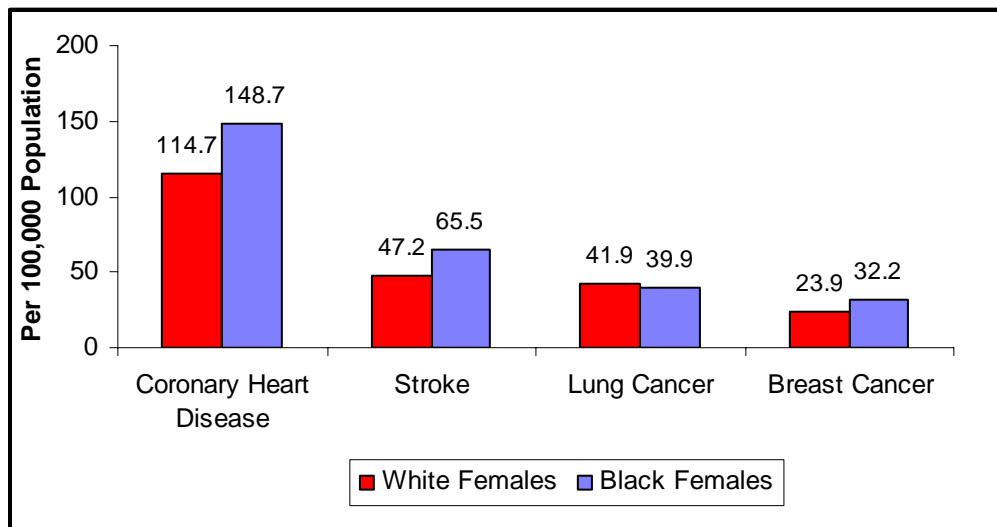
For black women the rates are

- 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: 2004



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:
 - 4.1 percent of men.
 - 4.1 percent of women.

(NHANES [1999-2004], 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 45 to 54 years of age, 13.1 for those age 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 2004 mortality showed that stroke caused the deaths of
 - 7,644 black males.
 - 10,474 black females.
- The 2004 overall death rate for stroke was 50.0. Death rates for blacks were
 - 74.9 for males.
 - 65.5 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):

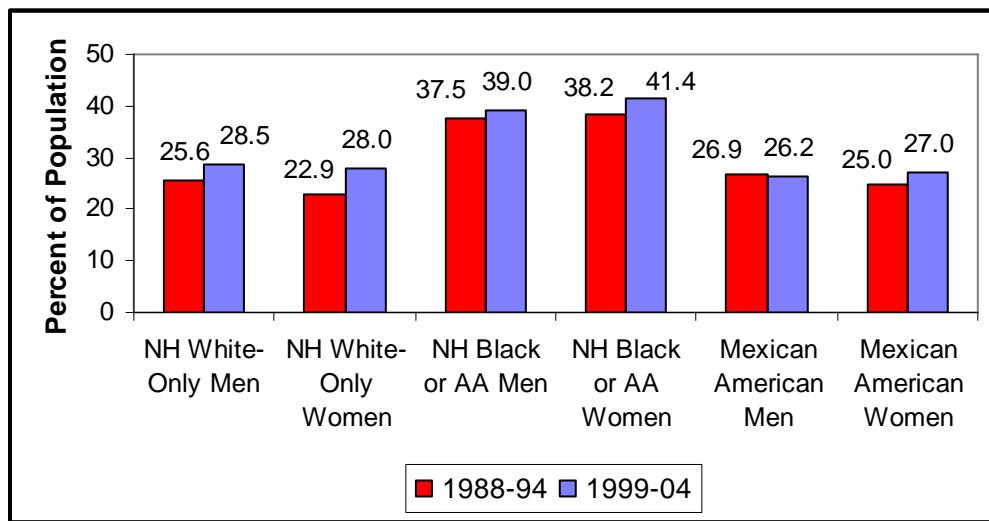
- 42.6 percent of men.
- 46.6 percent of women.

(NHANES [1999-2004], NCHS, and NHLBI)

- 2004 mortality data showed that HBP caused the deaths of
 - 5,762 black males.
 - 6,664 black females.
- The 2004 overall death rate from HBP was 18.1. Death rates for blacks were
 - 51.0 for males.
 - 40.9 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 and 1999–2004



Source: NCHS and NHLBI.

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

- The median age of the prevalent population is 58.1 years. For blacks it is 56.1 years. (USRDS 2004 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.
- ESRD attributed to glomerulonephritis was highest among blacks during 1994–2004.
- Blacks and Native Americans have much higher rates of ESRD than do whites and Asians. Blacks represent 29 percent of treated ESRD patients.

Cardiomyopathy (ICD/10 code I42) (ICD/9 code 425)

- Mortality from cardiomyopathy is highest in older persons, men and blacks. (*FHS, NHLBI*)
- The annual incidence is lower in white than black children; higher in boys than girls; higher in New England (1.44 per 100,000) than in the Central Southwest (0.98 per 100,000). (*Lipschutz SE, et al. The incidence of pediatric cardiomyopathy in two regions of the United States. NEJM 2003;348:1647–55*)

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

- The 2004 overall death rate for congenital cardiovascular defects was 1.3. Death rates for blacks were
 - 1.8 for males.
 - 1.4 for females.
- 2004 crude infant death rates (under 1 year) were
 - 38.3 for white infants.
 - 56.0 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:
 - 2.7 percent of men.
 - 3.3 percent of women.(*NHANES [1999-2004], 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.
- 2004 total mentions mortality data showed that HF caused the deaths of
 - 10,694 black males.
 - 14,250 black females.
- The 2004 overall total mentions mortality death rate from HF was 52.0. Death rates for blacks were
 - 78.8 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*)
- 2004 mortality data showed that rheumatic fever and rheumatic heart disease caused the deaths of
 - 84 black males.
 - 163 black females.
- The 2004 overall death rate from RF/RHD was 1.1. Death rates for blacks were
 - 0.6 for males.
 - 1.0 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. 23]:I-4-8*)

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 2004, among non-Hispanic blacks age 18 and older,
 - 26.7 percent of men smoke.
 - 17.3 percent of women smoke. (*MMWR Vol.55, No.42:1145-1148, 2006.*)

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:
 - 44.8 percent of men.
 - 42.1 percent of women.
- Among non-Hispanic blacks, the following have levels of 240 mg/dL or higher:
 - 14.1 percent of men.
 - 12.5 percent of women. (*NHANES 1999-2004. NCHS and NHLBI*)
- Among non-Hispanic blacks age 20 and older, the following have an LDL cholesterol of 130 mg/dL or higher:
 - 32.4 percent of men.
 - 29.8 percent of women.

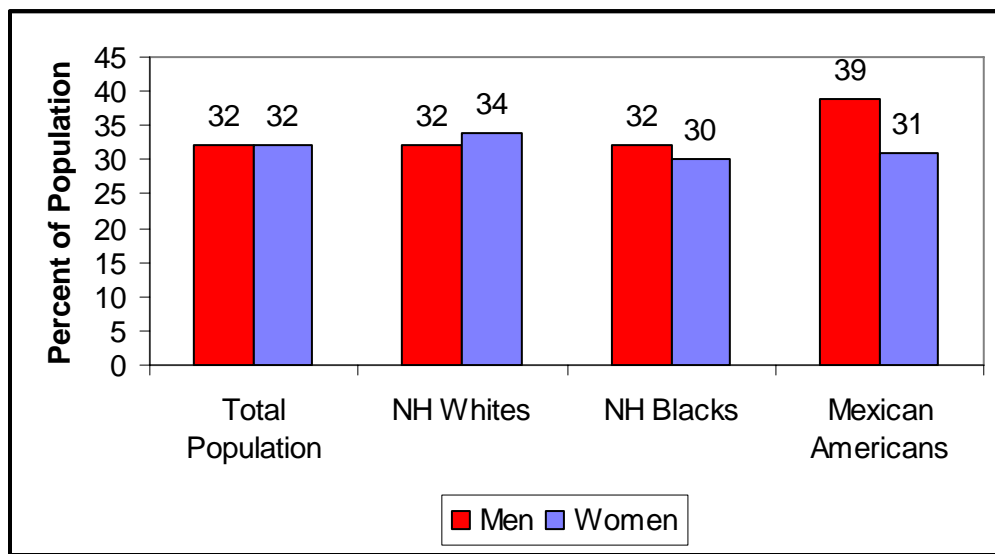
Low-density lipoprotein (LDL or bad) cholesterol levels of 130–159 mg/dL are considered borderline high. Levels of 160–189 mg/dL are classified as high, and levels of 190 mg/dL or higher are very high. Estimates are age-adjusted. (NHANES [1999-2004], NCHS)

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

(NHANES [1999-2004], NCHS)

Age-adjusted Prevalence of Adults Age 20 and Older with LDL Cholesterol of 130 mg/dL or Higher by Race/Ethnicity and Sex

NHANES: 2003–04



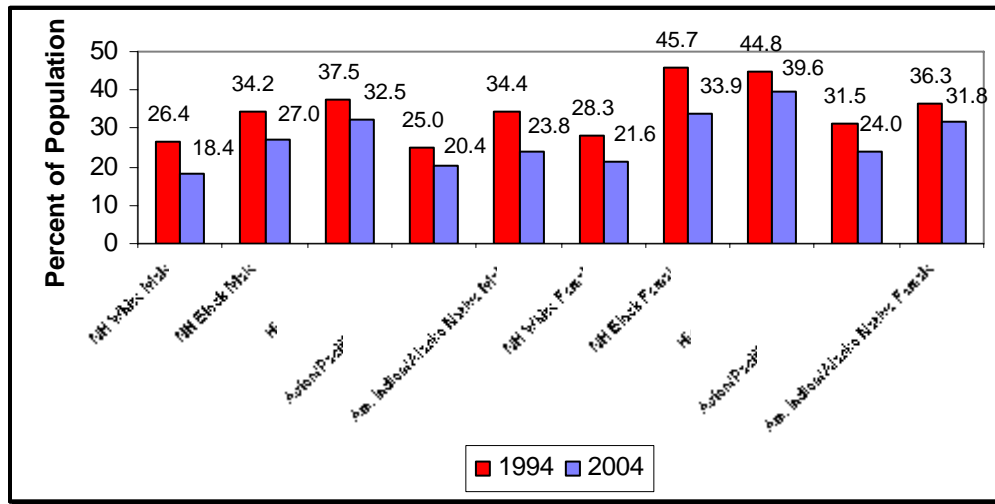
Source: NCHS and NHLBI. NH – non-Hispanic.

Physical Inactivity

- 25.3 percent of non-Hispanic blacks age 18 and older, report regular leisure-time physical activity. (www.cdc.gov/nchs/data/nhis/earlyrelease/earlyrelease200706.pdf)

Prevalence of Physical Inactivity Among Adults Age 18 and Older by Race/Ethnicity and Sex

BRFSS: 1994 and 2004



Source: MMWR, Vol. 54, No. 39, Oct. 7, 2005. NH – non-Hispanic.

Overweight and Obesity

- Among black adults age 20 and older, the following are overweight or obese (BMI of 25.0 kg/m² and higher):
 - 67.0 percent of men.
 - 79.6 percent of women.
- Of these, the following are obese (BMI of 30.0 kg/m² and higher):
 - 30.8 percent of men.
 - 51.1 percent of women.

(NHANES 2001-04; National Center for Health Statistics. Health, United States, 2006. Unpublished data. NCHS data in adults are for age 20 and older.)

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

- In the total population age 20 and older, 7.3 percent of men and 6.8 percent of women have physician-diagnosed diabetes. Among non-Hispanic blacks the prevalences are
 - 10.7 percent of men.
 - 13.2 percent of women.

(NHANES 1999-2004. NCHS and NHLBI)

- In the total population age 20 and older, 3.6 percent of men and 2.0 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
 - 1.7 percent of men.
 - 2.3 percent of women

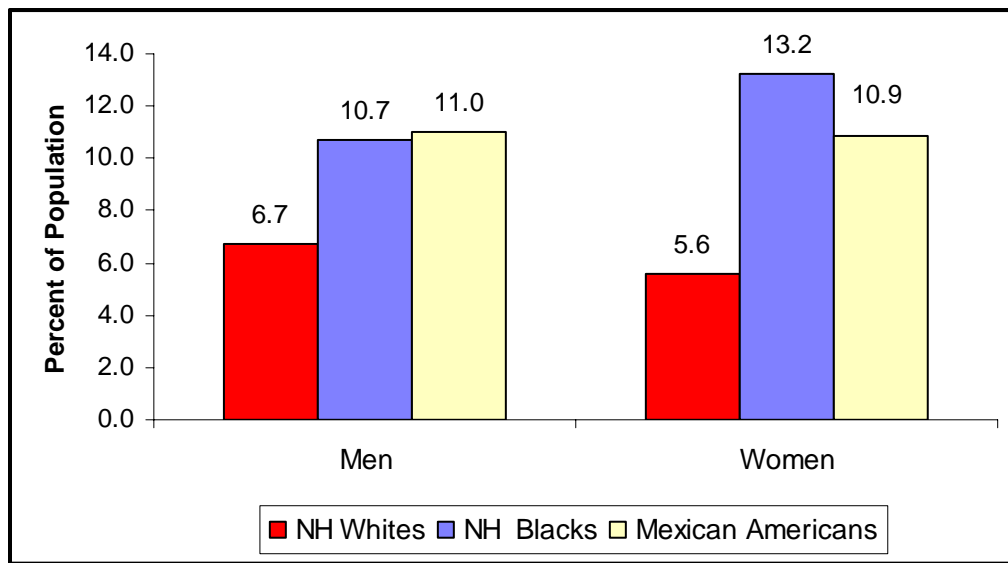
(NHANES 1999-2004. NCHS and NHLBI)

- In the total population age 20 and older, 33.5 percent of men and 22.6 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
 - 23.1 percent of men.

- 20.5 percent of women.
- In 2004 mortality for diabetes mellitus was
 - 5,565 black males.
 - 7,269 black females.
- The 2004 overall death rate from diabetes mellitus was 24.5 Death rates for blacks were
 - 51.3 for males.
 - 45.3 for females.
- Between NHANES III 1988–1994 (NCHS) and NHANES 1999–2002, considerable differences were found among ethnic groups in glycemic 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 glycemic control among adults with type 2 diabetes in the U.S. from 1988 to 2002. Diabetes Care. 2006; 29: 1924–1925e.)*

Prevalence of Physician-Diagnosed Diabetes in Americans Age 20 and Older by Sex and Race/Ethnicity

NHANES: 1999–2004



Source: NHANES (1999–2004). Percentages for racial/ethnic groups are age-adjusted standardized for Americans age 20 and older.

Metabolic Syndrome

- The prevalence of blacks with the metabolic syndrome are
 - 13.9 percent of men.
 - 20.9 percent of women.

(Park YW, et al. The metabolic syndrome prevalence and associated risk factor findings in the US population from the Third National Health and Nutrition Examination Survey, 1988-1994. Arch Intern Med 2003;163:427-36)

Abbreviations Used :

ARIC – Atherosclerosis Risk in Communities

BMI – Body mass index.

BRFSS – Behavioral Risk Factor Surveillance Study, CDC.

CHS – Cardiovascular Health Study

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 see the Heart Disease and Stroke Statistics – 2008 Update, published in *Circulation*, available on our Web site.