

2009 Statistical Fact Sheet — Populations

Older Americans and Cardiovascular Diseases — Statistics

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

- About 32 percent of cardiovascular disease deaths occur in people before age 75, which is close to the average life expectancy.
- In 2006, 6,161,000 Americans were discharged from short-stay hospitals with a first listed diagnosis of CVD; 62 percent were age 65 and older.

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

- About 82 percent of people who die of CHD are age 65 or older.
- In part because women have heart attacks at older ages than men do, they're more likely to die from them within a few weeks.
- In 2006, 1,760,000 Americans were discharged from short-stay hospitals with a first listed diagnosis of CHD; 55 percent were age 65 or older.

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

- The annual incidence rate per 1,000 population of episodes of angina for nonblack men is 28.3 for ages 65–74.
 - For nonblack women the rate is 14.1 for ages 65–74
 - For black men the rate is 22.4 for ages 65–74
 - For black women the rate is 15.3 for ages 65–74*(NHLBI. Incidence and Prevalence: 2006 Chart Book on Cardiovascular and Lung Diseases.)*
- In 2005, 44,000 Americans were discharged from short-stay hospitals with a first listed diagnosis of angina pectoris; 41 percent were age 65 or older.

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

- The incidence of stroke/TIA (transient ischemic attack (TIA), per 1,000 person years in white men is
 - 6.1 percent for ages 55–64
 - 12.2 percent for ages 65–74For white women, the incidence is
 - 4.8 percent for ages 55–64
 - 9.8 percent for ages 65–74For black men, the incidence is
 - 13.1 percent for ages 55–64
 - 16.2 percent for ages 65–74For black women, the incidence is

- 10.0 percent for ages 55–64
- 15.0 percent for ages 65–74

(ARIC Cohort, 1987–2001, NHLBI)

- Stroke is a leading cause of serious, long-term disability in the United States.
- About 86 percent of stroke deaths occur in people age 65 and older.
- The percent dead one year following a first stroke:
 - at age 40 and older, 21 percent of men and 24 percent of women.
 - at ages 40–69, 14 percent of white men, 20 percent of white women, 19 percent of black men and black women.
 - at age 70 and older, 24 percent of white men, 27 percent of white women, 25 percent of black men and 22 percent of black women.

(Based on pooled data from the FHS, ARIC and CHS studies of the NHLBI)
- In 2006, 889,000 Americans were discharged from short-stay hospitals with a first listed diagnosis of stroke; 68 percent were age 65 and older.

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

- The following have HBP (defined as systolic pressure of 140 mm Hg or higher or diastolic pressure of 90 mm Hg or higher, taking antihypertensive medicine or being told twice by a professional that you have high blood pressure):
 - At ages 55–64, 53.7 percent of men and 55.8 percent of women.
 - At ages 65–74, 64.7 percent of men and 69.69 percent of women.
 - At age 75 and older, 64.1 percent of men and 76.4 percent of women.

(NHANES [2005-2006], /NCHS and NHLBI)

- In 2005, 499,000 Americans were discharged from short-stay hospitals with a first listed diagnosis of HBP; 44 percent were age 65 and older.

Arrhythmias (ICD/10 codes I46-I49) (ICD/9 codes 426, 427)

- Participants in the FHS study of the NHLBI were followed from 1968–99. At age 40, lifetime risks for atrial fibrillation (AF) were 26.0 percent for men and 23.0 percent for women. At 80 years of age, lifetime risks for AF were 22.7 percent for men and 21.6 percent for women. In further analysis, counting only those who had development of AF without prior or concurrent congestive heart failure or MI, lifetime risk for AF was approximately 16 percent. (Lloyd-Jones DM, et al. Lifetime risk for development of atrial fibrillation: The Framingham Heart Study. *Circulation* 2004;110:1042–6)
- Data from the National Hospital Discharge Survey (1996–2001) on cases that included AF as a primary discharge diagnosis found that: (Khairallah F, et al. Epidemiology and determinants of outcome of admissions for atrial fibrillation in the United States from 1996 to 2001. *Am J Cardiol* 2004;94:500–4)
 - About 44.8 percent of patients were men.
 - The mean age for men was 66.8 years vs. 74.6 for women.
 - The racial breakdown for admissions was 71.2 percent white, 5.6 percent black, 2.0 percent other races (20.8 percent were not specified).
 - African-American patients were much younger than patients of other races.
 - The incidence in men ranged from 20.58/100,000 persons per year for patients ages

15–44 to 1,077.39/100,000 persons per year for patients age 85 and older. In women, the incidence ranged from 6.64/100,000 persons per year for patients ages 15–44 to 1,203.7/100,000 persons per year for those age 85 and older.

- From 1996–2001, hospitalizations with AF as the first-listed diagnosis increased 34 percent.

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

- Based on pooled data from the FHS, ARIC, and CHS studies of the NHLBI, the percentage of persons with a first MI who will have heart failure in five years is:
 - at ages 40–69, 7 percent of men and 12 percent of women
 - at age 70 and older, 22 percent of men and 25 percent of women
 - at ages 40–69, 7 percent of white men, 11 percent of white women, 11 percent of black men and 14 percent of black women
 - at age 70 and older, 21 percent of white men, 25 percent of white women, 29 percent of black men and 24 percent of black women
- Data from the NHLBI's NHLBI-sponsored FHS indicate that:
 - HF incidence approaches 10 per 1,000 population after 65 years of age.
 - Seventy-five percent of HF cases have antecedent hypertension.
 - At 40 years of age, the lifetime risk of developing HF for both men and women is one in five. At age 80, remaining lifetime risk for development of new HF remains at approximately 20 percent for men and women, even in the face of a much shorter life expectancy.
 - At 40 years of age, the lifetime risk of HF occurring without antecedent myocardial infarction is one in nine for men and one in six for women.
 - The lifetime risk for people with BP >160/90 mm Hg is double that of those with BP <140/90 mm Hg.
- The annual rates per 1,000 population, of new HF events for white men, are 15.2 for ages 65–74, 31.7 for ages 75–84, and 65.2 for age 85 and older. For white women in the same age groups the rates are 8.2, 19.8 and 45.6, respectively. For black men the rates are 16.9, 25.5 and 50.6*, and for black women the rates are 14.2, 25.5 and 44.0*, respectively (CHS, NHLBI). *Unreliable estimate.
- In 2005, 1,084,000 Americans were discharged from short-stay hospitals with a first listed diagnosis of heart failure. In 2004, 75 percent were age 65 and older.

Tobacco

- In 2006 studies show that 12.6 percent of men and 8.3 percent of women age 65 and older smoke. (NHIS, 2005. HUS 2007)

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 people ages 55–64, the following have total blood cholesterol 200 mg/dL or higher.
 - 48.8 percent of men.
 - 66.9 percent of women.

For ages 65–74:

- 32.2 percent of men.
- 57.6 percent of women.

For age 75 and older:

- 31.0 percent of men.
- 48.5 percent of women.

(NHANES [2005-2006], NCHS and NHLBI)

- Among people ages 55–64 the following have total blood cholesterol of 240 mg/dL or higher:

- 15.5 percent of men.
- 31.2 percent of women.

For ages 65–74:

- 8.8 percent of men.
- 23.4 percent of women.

For age 75 and older:

- 9.6 percent of men.
- 15.1 percent of women.

(NHANES [2005-2006], NCHS and NHLBI)

Overweight and Obesity

- Among people ages 55–64, the following are overweight or obese, defined as a BMI (body mass index) of 25.0 kg/m² and higher:

- 82.4 percent of men.
- 70.7 percent of women.

(NHANES 2005-2006. NCHS and NHLBI)

- Among people ages 65–74, the following are overweight or obese:

- 79.5 percent of men.
- 69.4 percent of women.

- Among people age 75 and over, the following are overweight or obese:

- 65.6 percent of men.
- 57.5 percent of women.

- Among people ages 55–64, the following are obese, defined as a BMI of 30.0 kg/m² and higher:

- 43.0 percent of men.
- 44.4 percent of women.

- Among people ages 65–74, the following are obese:

- 32.4 percent of men.
- 36.7 percent of women.

- Among people age 75 and over, the following are obese:

- 25.3 percent of men.
- 24.4 percent of women.

(NHANES 2005-2006. NCHS and NHLBI)

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

- In people age 65-74, the following have physician-diagnosed diabetes:
 - 18.2 percent of men.
 - 18.9 percent of women
(NHANES [2005-2006], NCHS/NHLBI.)
- In people ages 75-84, the following have physician-diagnosed diabetes:
 - 14.4 percent of men.
 - 14.4 percent of women
(NHANES [2005-2006], NCHS/NHLBI.)
- In people age 85 and older, the following have physician-diagnosed diabetes:
 - 5.8 percent of men.
 - 18.1 percent of women
(NHANES [2005-2006], NCHS/NHLBI.)
- In 2006, 584,000 Americans were discharged from short-stay hospitals with a first listed diagnosis of diabetes., 32 percent were age 65 and older.

Surgery

- According to data from the NCHS, 54 percent of bypass and 50 percent of PCI procedures in 2006 were performed on patients age 65 and older.
- In 2006, 44 percent of heart transplant recipients were ages 50–64.

Abbreviations Used:

ARIC – Atherosclerotic Risk in Communities study, NHLBI
CHS – Cardiovascular Health Study, NHLBI
FHS – Framingham Heart Study, NHLBI
ICD – International Classification of Diseases
HUS – Health, United States, NCHS
Kg/m² – kilograms per square meter
NCHS – National Center for Health Statistics
NHANES – National Health and Nutrition Examination Survey, NCHS
NHIS – National Health Interview study, NCHS
NHLBI – National Heart, Lung, and Blood Institute
PCI – percutaneous coronary intervention

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