



## 2019 Heart Disease & Stroke Statistical Update Fact Sheet Females & Cardiovascular Diseases\*

### Cardiovascular Disease (CVD) (ICD-9 390 to 459; ICD/10 I00 to I99)

- Among females age 20 and older between 2013 and 2016, 44.7% had some form of cardiovascular disease.
- Among females age 20 and older between 2013 and 2016, 43.4% of non-Hispanic (NH) whites had CVD; 57.1% of NH blacks, 42.6% of Hispanics, and 37.2% of NH Asians.
- In 2016, CVD was the cause of death in 412,244 females (all ages). Females represented about 49.0% of deaths from CVD.
- In 2016, CVD caused the death of 412,244 females, which is more than the total combined deaths from Cancer, Accidents, and Diabetes in females (377,272).
- In 2016, CVD was the disease with the highest percent of total deaths for all subgroups of females; 30.5% of all NH white female deaths, 32.8% of NH black female deaths, 28.8% of Hispanic female deaths, and 32.0% of NH Asian female deaths.
- In 2014, CVD was the first listed diagnosis of about 2.2 million females discharged from short-stay hospitals.
- In 2014, 25.3% of bypass and 32.3% of percutaneous coronary intervention patients were female.

### Coronary Heart Disease (CHD) (ICD-9 410 to 414, 429.2; ICD-10 I20 to I25, includes MI ICD-10 I21 to I22)

- Using data from 2013–2016, about 8.8 million females alive had CHD. Of these, 3.3 million had a history of myocardial infarction (MI, or heart attack).
- Using 2013–2016 data, among females age 20 and older, 2.2% of NH whites had a previous MI; 2.2% of NH blacks, 2.0% of Hispanics, and 1.0% of NH Asians.
- Based on data from 2005 to 2014, each year new and recurrent MI and fatal CHD will impact an estimated 445,000 females, age 35 and older.
- Between 2013 and 2016, the prevalence of CHD in females was 6.2% and 7.4% in males. Based on data from 2005 to 2014, the average age at first MI was 72.0 years for females and 65.6 years for males.
- In 2016, 153,296 females died from CHD; 47,064 from MI.
- Based on data from 1995 to 2012, 23% of females age 45 and older who have an initial recognized MI (heart attack) die within a year compared with 18% of males. However, within 5 years after a first MI, 36% of males and 47% of females will die. Females have heart attacks at older ages than males do and they're more likely to die from them within a few weeks.
- 372,000 females diagnosed with CHD were discharged from short-stay hospitals in 2014.

### Stroke (ICD-9 430 to 438; ICD-10 I60 to I69)

- Using data from 2013–2016, an estimated 3.8 million females vs. 3.2 million male stroke survivors, age 20 and older, were alive. With the increase in the aging population, prevalence of stroke survivors is projected to increase, especially among elderly females.
- Using data from 2013–2016, among females age 20 and older, 2.5% of NH whites had a previous stroke; 3.8% of NH blacks; 2.2% of Hispanics; and 1.6% of NH Asians.

\* Due to inconsistencies in reporting, some statistics may be unreliable.  
Unless otherwise noted, all statistics in this Fact Sheet pertain to the United States.

## Stroke (ICD-9 430 to 438; ICD-10 I60 to I69) (continued)

- The highest rates for stroke are in the oldest age groups.
- In 2016, stroke caused the deaths of 82,787 females (58.2% of total stroke deaths).
- In 2014, 454,000 females were discharged from short-stay hospitals after having a stroke.

## High Blood Pressure (HBP) (ICD-9 401 to 404; ICD-10 I10 to I15)

- In 2013–2016, a higher percentage of males than females had hypertension up to 64 years of age. For individuals age 65 and older, the percentage of females with hypertension was higher than for males.
- Among females age 20 and older in 2013–2016, the following had HBP: 41.3% of NH whites; 56.0% of NH blacks; 40.8% of Hispanics; and 36.4% of NH Asians.
- Of females with HBP between 2013 and 2016, only 29.4% of NH whites had their BP under control; 26.5% of NH blacks; 27.5% of Hispanics, and 16.3% NH Asians.
- In 2016, 43,158 females died from HBP. They represented 52.2% of deaths from HBP.
- 150,000 females diagnosed with HBP were discharged from short-stay hospitals in 2014.

## Heart Failure (HF) (ICD-9 428; ICD-10 I50)

- According to 2013–2016 data, about 3.2 million adult females have HF. In 2014, about 505,000 new cases were diagnosed in females age 55 years and older.
- Among females age 20 and older, 1.9% of NH whites have HF; 3.9% of NH blacks, 2.1% of Hispanics, and 0.7% of NH Asians.
- In 2016, there were 42,932 female deaths from HF (54.8% of HF deaths).
- 438,000 females diagnosed with HF were discharged from short-stay hospitals in 2014.

## Cardiovascular Health

- Based on 2013–2014 data, only 18.1% of US adults had  $\geq 5$  (of 7 possible) metrics at ideal levels of cardiovascular health, with lower prevalence in males (14.8%) than in females (21.5%).
- Younger adults are more likely to meet greater numbers of ideal metrics than are older adults. More than 60% of Americans  $>60$  years of age have  $\leq 2$  metrics at ideal levels. At all ages, females tend to have more metrics,  $\geq 4$  (of 7 possible), at ideal levels than do males.

## Smoking

- In 2015, prevalence of cigarette use in the past month in male and female adolescents aged 12 to 17 years was 4.2%; lifetime use of tobacco products was higher among boys (19.1%) than girls (15.3%).
- Among adults age 18 years and older in 2016, 13.5% of females and 17.5% of males were current smokers.
- Among females who gave birth in 2016, 7.2% smoked cigarettes during pregnancy. Rates were highest for pregnant females under 30 years of age and among NH American Indians and Alaska Natives at all ages.
- Worldwide, in 2015, tobacco smoke caused 1.9 million female deaths.

## High Blood Cholesterol and Other Lipids

- According to 2013–2016 data, among children 6 to 11 years of age, the mean total cholesterol level was 157.8mg/dL; for boys, 157.9 mg/dL for boys and 157.7 mg/dL for girls.

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## High Blood Cholesterol and Other Lipids (continued)

- According to 2013–2016 data, among adolescents 12 to 19 years of age, the mean total cholesterol level was 154.4 mg/dL; 151.6 mg/dL for boys and 157.5 mg/dL for girls.
- Among adults age 20 and older:
  - 35.4% of males and 40.4% of females had total cholesterol levels of 200 mg/dL or higher between 2013 and 2016.
  - 10.7% of males and 12.4% of females had total cholesterol levels of 240 mg/dL or higher between 2013 and 2016.
  - 30.0% of males and 30.4% of females had an LDL cholesterol of 130 mg/dL or higher between 2011 and 2014.
  - 29.0% of males and 9.9% of females had HDL cholesterol less than 40 mg/dL between 2013 and 2016.

## Physical Inactivity

- In 2015, high school aged girls were more likely than boys to report inactivity in the past week (17.5% versus 11.1%).
- The percent of students who met activity recommendations of  $\geq 60$  minutes of aerobic PA (physical activity) on all 7 days of the week was 27.1% nationwide and declined from 9th (31.0%) to 12th (23.5%) grades. At each grade level and also among each race category, the percent was higher in boys than girls.
- According to a 2008 study, among female adults, self-reported physical activity was 138% greater than actual measured PA; among male adults, self-reported PA was 44% greater than actual measured values.
- Only 26.3% of adult males and 18.8% of females met the 2008 Federal Physical Activity Guidelines for both aerobic and strengthening PA in 2016.

## Overweight and Obesity

- Using data from 2011–2014:
- An estimated 32.0% of girls age 2 to 19 are overweight or obese; 28.0% NH whites, 37.6% NH blacks, 15.0% NH Asian, and 39.8% Hispanics.
- Of all girls, 16.7% are obese; 14.7% of NH whites, 20.0% of NH blacks, 5.3% of NH Asian, and 21.0% of Hispanics.
- An estimated 66.4% of females age 20 and older are overweight or obese; 63.7% of NH whites, 82.2% of NH blacks, 34.6% of NH Asians, and 77.1% of Hispanics.
- Of all adult females, 38.3% are obese; 35.5% of NH whites, 56.9% of NH blacks, 11.9% of NH Asians, and 45.7% of Hispanics.

## Diabetes Mellitus (ICD-9 250; ICD-10 E10 to E14)

- Based on 2013–2016 data, of the estimated 26.0 million American adults with physician-diagnosed diabetes, about 12.3 million were females; 7.3% of NH white females, 13.4% of NH black females, 14.1% of Hispanic females and 9.9% of NH Asian females.
- Based on 2013–2016 data, of the estimated 9.4 million Americans with undiagnosed diabetes, about 3.9 million were females; 2.6% of NH white females, 3.3% of NH black females, 4.0% of Hispanic females, and 2.1% of NH Asian females.
- Based on 2013–2016 data, of the estimated 91.8 million Americans with prediabetes, about 40.1 million were females; 32.2% of NH white females; 24.0% of NH black females, 31.7% of Hispanic females, and 29.4% of NH Asian females.

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## Females & CVD - 2019 Statistical Fact Sheet\*

For additional information, charts and tables, see  
[Heart Disease & Stroke Statistics - 2019 Update](#)

Additional charts may be downloaded directly from  
<https://www.ahajournals.org/doi/10.1161/CIR.0000000000000659> or  
<https://www.heart.org/en/about-us/heart-and-stroke-association-statistics>

Many statistics in this Fact Sheet come from unpublished tabulations compiled for this document and can be cited using the document citation listed below. The data sources used for the tabulations are listed in the full document. Additionally, some statistics come from published studies. If you are citing any of the statistics in this factsheet, please review the full Heart Disease and Stroke Statistics document to determine data sources and original citations.

The American Heart Association requests that this document be cited as follows:

Benjamin EJ, Muntner P, Alonso A, Bittencourt MS, Callaway CW, Carson AP, Chamberlain AM, Chang AR, Cheng S, Das SR, Delling FN, Djousse L, Elkind MSV, Ferguson JF, Fornage M, Jordan LC, Khan SS, Kissela BM, Knutson KL, Kwan TW, Lackland DT, Lewis TT, Lichtman JH, Longenecker CT, Loop MS, Lutsey PL, Martin SS, Matsushita K, Moran AE, Mussolino ME, O'Flaherty M, Pandey A, Perak AM, Rosamond WD, Roth GA, Sampson UKA, Satou GM, Schroeder EB, Shah SH, Spartano NL, Stokes A, Tirschwell DL, Tsao CW, Turakhia MP, VanWagner LB, Wilkins JT, Wong SS, Virani SS; on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics - 2019 update: a report from the American Heart Association [published online ahead of print January 31, 2019]. *Circulation*. doi: 10.1161/CIR.0000000000000659.

If you have questions about statistics or any points made in the 2019 Statistical Update, please contact the American Heart Association National Center, Office of Science & Medicine at [statistics@heart.org](mailto:statistics@heart.org). Please direct all media inquiries to News Media Relations at <http://newsroom.heart.org/newsmedia/contacts>.

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