



2021 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 20 years of age and older between 2015 and 2018, 44.4% had some form of cardiovascular disease.
- Among females 20 years of age and older between 2015 and 2018, 42.1% of non-Hispanic (NH) White females had CVD; 58.8% of NH Black females, 42.7% of Hispanic females, and 42.5% of NH Asian females.
- In 2018, CVD was the cause of death in 420,164 females (all ages). Females represented 48.4% of deaths from CVD.
- In 2018, CVD was the disease with the highest percent of total deaths for all subgroups of females; 30.3% of all NH White female deaths, 32.6% of NH Black female deaths, 28.3% of Hispanic female deaths, and 31.3% of NH Asian female deaths.
- In 2016, CVD was the first listed diagnosis of 2,211,000 million females discharged from short-stay hospitals.
- In 2014, 25.3% of bypass and 32.3% of percutaneous coronary intervention patients were female.
- Of the heart transplant recipients in 2019, 30.5% 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 2015 to 2018, about 9.1 million females alive had CHD. Of these, 3.0 million had a history of myocardial infarction (MI, or heart attack).
- Using 2015 to 2018 data, among females 20 years of age and older, 2.0% of NH White females had a previous MI; 2.3% of NH Black females, 2.1% of Hispanic females, and 0.7% of NH Asian females.
- Using 2015 to 2018 data, among females 20 years of age and older, 6.0% of NH White females had CHD; and 7.2% of NH Black females, 6.4% of Hispanic females and 3.2% of Asian females. Between 2015 and 2018, the overall prevalence of CHD was 6.2% of females and 8.3% of 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.
- 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.
- In 2018, 150,712 females died from CHD; 44,531 from MI.
- Based on data from 1995 to 2012, 23% of females age 45 and older who had an initial recognized MI died within a year compared with 18% of males. However, within 5 years after a first MI, 36% of males and 47% of females died. Females have MIs at older ages than males do and they're more likely to die from them within a few weeks.
- 381,000 females diagnosed with CHD were discharged from short-stay hospitals in 2016.

* 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)

- Using data from 2015 to 2018, an estimated 4.1 million female vs. 3.5 million male stroke survivors, 20 years of age and older, were alive.
- Using data from 2015 to 2018, among females 20 years of age and older, 2.5% of NH White females had a previous stroke; 4.9% of NH Black females; 1.7% of Hispanic females; and 1.0% of NH Asian females.
- The highest rates for stroke are in the oldest age groups.
- In 2018, stroke caused the deaths of 84,966 females (57.5% of total stroke deaths).
- In 2016, 436,000 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 2015 to 2018, a higher percentage of males than females had hypertension up to 64 years of age. For individuals 65 years of age and older, the percentage of females with hypertension was higher than for males.
- Among females 20 years of age and older in 2015 to 2018, the following had HBP: 40.5% of NH White females; 57.6% of NH Black females; 40.8% of Hispanic females; and 42.1% of NH Asian females.
- Of females with HBP between 2015 and 2018, only 22.7% of NH White females had their BP under control; 19.7% of NH Black females; 16.1% of Hispanic females, and 14.8% NH Asian females.
- In 2018, 49,752 females died from HBP. They represented 51.9% of deaths from HBP.
- 240,000 females diagnosed with HBP were discharged from short-stay hospitals in 2016.

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

- According to 2015 to 2018 data, about 2.6 million adult females have HF (1.7% of females). In 2014, about 505,000 new cases were diagnosed in females 55 years of age and older.
- Among females 20 years of age and older, 1.4% of NH White females have HF; 3.3% of NH Black females, 1.7% of Hispanic females, and 0.7% of NH Asian females.
- In 2018, there were 45,129 female deaths from HF (54.0% of HF deaths).
- 394,000 females diagnosed with HF were discharged from short-stay hospitals in 2016.

Smoking

- According to 2018 data, lifetime use of tobacco products for individuals 12 to 17 years of age was lower in females than males (12.0% vs 14.7%).
- Among adults 18 years of age and older in 2018, 12.0% of females and 15.6% of males were current smokers.
- In 2019, 27.4% of female high school students used e-cigarettes compared with 27.6% of male students.
- 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 2019, tobacco smoke caused 2.1 million female deaths and 6.6 million male deaths.

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High Blood Cholesterol and Other Lipids

- According to 2015 to 2018 data, among children 6 to 11 years of age, the mean total cholesterol level was 157.3 mg/dL; 157.4 mg/dL for boys and 157.1 mg/dL for girls.
- According to 2015 to 2018 data, among adolescents 12 to 19 years of age, the mean total cholesterol level was 155.1 mg/dL; 152.7 mg/dL for males and 157.5 mg/dL for females.
- Among adults 20 years of age and older:
 - 35.3% of males and 40.4% of females had total cholesterol levels of 200 mg/dL or higher in 2015 to 2018.
 - 10.5% of males and 12.1% of females had total cholesterol levels of 240 mg/dL or higher in 2015 to 2018.
 - 30.1% of males and 27.6% of females had low-density lipoprotein (LDL) cholesterol of 130 mg/dL or higher in 2013 to 2016.
 - 26.6% of males and 8.5% of females had high-density lipoprotein (HDL) cholesterol less than 40 mg/dL in 2015 to 2018.

Physical Inactivity

- In 2017, girls of high school age were more likely than boys to report inactivity in the past week (19.5% versus 11.0%).
- According to 2017 data, the prevalence of high school students who met aerobic activity recommendations of ≥ 60 minutes of PA on all 7 days of the week was 26.1% nationwide and was lower with each successive grade (from 9th [30.6%] to 12th [22.9%] grades). At each grade level, the prevalence was higher in boys than in girls.
- Only 27.4% of adult males and 20.8% of females met the 2018 Federal Physical Activity Guidelines for both aerobic and strengthening PA in 2018.

Overweight and Obesity

Using data from 2015 to 2018:

- An estimated 35.8% of girls age 2 to 19 are overweight or obese; 31.7% NH White females, 45.2% NH Black females, 43.8% Hispanic females, and 18.8% NH Asian females.
- Of all girls, 18.0% are obese; 14.2% of NH White females, 27.1% of NH Black females, 23.4% of Hispanic females, and 7.4% of NH Asian females.
- An estimated 68.1% of females 20 years of age and older are overweight or obese; 65.4% of NH White females, 78.4% of NH Black females, 77.8% of Hispanic females, and 42.9% of NH Asian females.
- Of all adult females, 41.1% are obese; 38.7% of NH White females, 55.2% of NH Black females, 46.2% of Hispanic females, and 15.9% of NH Asian females.

Diabetes (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 (8.9% of all 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 to 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 to 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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Diabetes (ICD-9 250; ICD-10 E10 to E14) (continued)

- In 2018, diabetes caused the deaths of 37,395 females.
- 261,000 females diagnosed with diabetes were discharged from short-stay hospitals in 2016.
- Among national health survey participants enrolled in 2000 to 2009, followed up through 2011, and diagnosed with diabetes, females had 1.69 times higher risk of death from all causes and males had 1.56 times higher risk.

For additional information, charts and tables, see
[Heart Disease & Stroke Statistics – 2021 Update](#)

Additional charts may be downloaded directly from the [online publication](#) or www.heart.org/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:

Virani SS, Alonso A, Aparicio HJ, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, Chamberlain AM, Cheng S, Delling FN, Elkind MSV, Evenson KR, Ferguson JF, Gupta DK, Khan SS, Kissela BM, Knutson KL, Lee CD, Lewis TT, Liu J, Loop MS, Lutsey PL, Ma J, Mackey J, Martin SS, Matchar DB, Mussolino ME, Navaneethan SD, Perak AM, Roth GA, Samad Z, Satou GM, Schroeder EB, Shah SH, Shay CM, Stokes A, VanWagner LB, Wang N-Y, Tsao CW; on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2021 update: a report from the American Heart Association [published online ahead of print January 27, 2021]. *Circulation*. doi: 10.1161/CIR.0000000000000950

If you have questions about statistics or any points made in the 2021 Statistical Update, please contact the American Heart Association National Center, Office of Science & Medicine at statistics@heart.org. Please direct all media inquiries to News Media Relations at <http://newsroom.heart.org/newsmedia/contacts>.

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