



2022 Heart Disease & Stroke Statistical Update Fact Sheet Global Burden of Disease

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

- In 2020, approximately 19.1 million deaths were attributed to CVD globally. The age-adjusted death rate per 100,000 population was 239.8. The age-adjusted prevalence rate was 7354.1 per 100,000.
- The highest mortality rates attributable to CVD in 2020 were in Eastern Europe and Central Asia, with higher levels also seen in Oceania, North Africa and the Middle East, Central Europe, sub-Saharan Africa, and South and Southeast Asia. Rates were lowest for locations in high-income Asia Pacific and North America, Latin America, Western Europe, and Australasia.

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

- Globally, it was estimated that in 2020, 244.1 million people were living with ischemic heart disease (IHD), and it was more prevalent in males than in females (141.0 and 103.1 million people, respectively).
- In 2020, North Africa and the Middle East, Central and South Asia, and Eastern Europe had the highest prevalence rates of IHD in the world.
- In 2020, IHD mortality rates were 112.37 per 100,000. IHD mortality rates were highest in North Africa and the Middle East, Eastern Europe, and Central Asia.

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

- Global prevalence of stroke in 2020 was 89.1 million people, whereas that of ischemic stroke was 68.2 million, that of intracerebral hemorrhage was 18.9 million, and that of subarachnoid hemorrhage was 8.1 million.
- Overall, in 2020, age-standardized stroke prevalence rates were highest in sub-Saharan Africa and parts of the southeastern United States and East and Southeast Asia.
 - Age-standardized prevalence of ischemic stroke was highest in eastern United States and sub-Saharan Africa.
 - Age-standardized prevalence of intracerebral hemorrhage was highest in Oceania, western sub-Saharan Africa, and Southeast Asia.
 - Age-standardized prevalence of subarachnoid hemorrhage was highest in Japan and Andean Latin America.
- In 2020, there were 7.1 million deaths attributable to cerebrovascular disease worldwide. Globally in 2020, a total of 3.5 million individuals died of ischemic stroke, 3.3 million died of intracerebral hemorrhage, and 0.4 million died of subarachnoid hemorrhage.
- In 2020, age-standardized mortality attributable to stroke was highest in Central, Southeast, and East Asia, Oceania, and sub-Saharan Africa.
 - Age-standardized mortality attributable to ischemic stroke was highest in Eastern Europe and Central Asia.
 - Age-standardized intracerebral hemorrhage mortality was highest in Oceania, followed by western, central, and eastern sub-Saharan Africa and Southeast Asia.
 - Age-standardized mortality estimated for subarachnoid hemorrhage was highest in Oceania, Andean Latin America, and Central Asia.

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

- Based on 2020 data, age-standardized mortality rates attributable to high systolic blood pressure (SBP) were highest in Central and Southeast Asia, Eastern and Central Europe, and parts of Africa and the Middle East.
- Between 1990 and 2015, the number of deaths related to SBP \geq 140 mm Hg did not increase in high-income countries (from 2.197 to 1.956 million deaths) but did increase in high-middle-income (from 1.288 to 2.176 million deaths), middle-income (from 1.044 to 2.253 million deaths), low-middle-income (from 0.512 to 1.151 million deaths), and low-income (from 0.146 to 0.293 million deaths) countries.
- Based on 2015 data, there were 3.47 billion adults worldwide with SBP of 110 to 115 mm Hg or higher. Of this group, 874 million had SBP \geq 140 mm Hg.

High Blood Cholesterol and Other Lipids

- In 2020, high low-density lipoprotein cholesterol accounted for 4.5 million deaths.
- In 2020, the age standardized mortality rates (per 100 000) attributable to high LDL-C were highest in Eastern Europe and Central Asia.

Smoking

- In 2015, there were a total of 933.1 million smokers globally, of whom 82.3% were male. Tobacco (including smoking, secondhand smoke, and chewing tobacco) caused an estimated 8.1 million deaths globally in 2020 (6.3 million men and 1.8 million women).
 - Global Burden of Disease study investigators estimated that in 2019, smoking tobacco was the second-leading risk of mortality (high SBP was number 1), and tobacco ranked third in disability-adjusted life years globally.
- Based on 2020 data, Oceania, East and Central Asia, and Central and Eastern Europe had the highest age-standardized mortality rates attributable to tobacco.

Physical Inactivity

- Prevalence of physical inactivity in 2016 was reported to be 27.5% of the population globally. There were higher numbers of women than men reporting insufficient physical activity globally.
- Mortality rates attributable to low physical activity were highest in North Africa and the Middle East and southern sub-Saharan Africa in 2020.

Overweight and Obesity

- Based on 2020 data, age-standardized mortality rates attributable to high body mass index were lowest in high-income Asia Pacific and highest in Oceania, Central Asia, the Middle East and North Africa, southern sub-Saharan Africa, and locations in Central and Eastern Europe, Central sub-Saharan Africa, and Central Latin America.
- High BMI was attributed to 2.40 million global deaths in 2020.

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

- Based on 2020 data, overall, 243.3 million males and 229.0 million females worldwide had diabetes.
- Age-standardized mortality rates attributable to high fasting plasma glucose were highest in Oceania and sub-Saharan Africa, Central Latin America, and locations in South and Southeast Asia. Age-standardized mortality attributable to diabetes was highest in Oceania, southern sub-Saharan Africa, central sub-Saharan Africa, and Central Latin America.
- The age-standardized prevalence of diabetes was highest in Oceania, high-income North America, North Africa and the Middle East, the Caribbean, and Central Latin America.
- The global economic burden of diabetes was \$1.3 trillion in 2015. It is estimated to increase to \$2.1 to \$2.5 trillion by 2030.

**For additional information, charts and tables, see
*Heart Disease & Stroke Statistics – 2022 Update***

Additional charts may be downloaded directly from the online publication or www.heart.org/statistics.

Many statistics in this At-a-Glance document 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 At-a-Glance document, 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:

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