## **HFSTATS SHEET**

## Heart Failure-Related Mortality Rates



- HF mortality rates have been increasing since 2012, with a more pronounced acceleration in 2020-2021 (Figure 1).<sup>1</sup>
   This occurred despite the advances in guideline-directed therapies in HF over the last decade.
- Although this reversal in the HF-related mortality rate preceded the COVID-19 pandemic with increases in AAMR beginning in 2012, larger increases occurred in 2020 and 2021, suggesting that the pandemic may have accelerated the worsening of HF-related mortality.<sup>1</sup>
- The age-adjusted HF mortality rates were higher in 2021 than in 1999 (Figure 1).<sup>1</sup>
- In 2022 in the US, HF was a contributing cause of 425,147 deaths, representing 45% of the 941,652 total cardiovascular deaths, and 13% of the 3,279,857 total all-cause deaths.<sup>2</sup>
- Globally, there is evidence that hospital readmissions for HF are associated with increased risk of mortality and progressively increase with each subsequent rehospitalization.<sup>3-5</sup>
- Among US patients 65 years and older hospitalized for HF, the 1-year post-discharge mortality rate is estimated at 35%.<sup>6</sup>
  The estimated mortality rates for this population at 30 days post-admission and 30 days post-discharge are 7% and 5%, respectively.<sup>7</sup>

Figure 2: Crude Death Rates Related to Heart Failure per 100,000 Population in the US Between 1998 and 2023

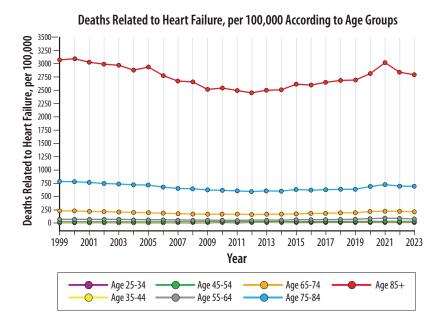
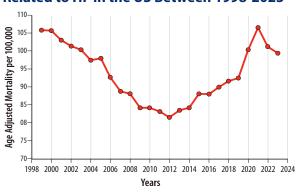


Figure 1: Age-Adjusted Mortality Rates
Related to HF in the US Between 1998-2023



- Among ambulatory chronic HF patients, the 1-year mortality rate is estimated at 13.5%.<sup>8</sup>
   Applying this rate to the estimated 64 million patients living with HF worldwide approximately 8.3 million individuals with HF are projected to die each year globally.<sup>8,9</sup>
- As expected, HF-related mortality rates are higher in older adults (65-84 years) compared to younger adults (35-64 years) (Figure 2).
- There has been a more pronounced relative annual increase in HF-related mortality rates observed among adults aged 35 to 64 years.
- Overall, females have a lower age-adjusted mortality rate related to HF compared with males (Figure 3).

Figure 3: Deaths Related to Heart Failure Stratified by Sex

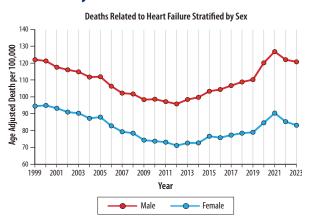




Table 1: US Heart Failure Age-Adjusted Mortality Rate Per 100,000 Among Individuals Age 25+ Years

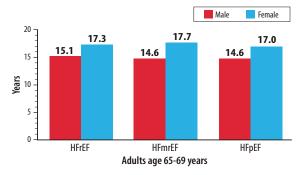
	Non-Hispanic American Indian or Alaska Native	Non-Hispanic Asian	Non-Hispanic Native Hawaiian or other Pacific Islanders	Non-Hispanic Black or African American	Non-Hispanic White	Hispanic	More than one race
Heart Failure Age-Adjusted Mortality Rates per 100,000 population							
2023	19.7 (17.5-22.0)	13.3 (12.7-13.9)	27.8 (22.3-33.4)	41.1 (40.3-41.9)	34.8 (34.6-35.1)	20.9 (20.3-21.5)	11.6 (10.2-12.9)
2018	18.9 (16.5-21.3)	12.3 (11.6-12.9)	26.0 (20.2-33.1)	39.7 (38.9-40.5)	33.7 (33.4-33.9)	18.3 (17.7-18.8)	12.4 (10.8-14.0)
2015#	23.2 (20.4-26.0)	11.2* (10.6-11.9)	_	35.9 (35.1-36.8)	32.1 (31.8-32.3)	17.5 (16.9-18.1)	_
2010#	24.6 (21.2-28.1)	10.3* (9.5-11.1)	_	30.5 (29.7-31.4)	27.5 (27.3-27.8)	15.4 (14.7-16.1)	_
All-Cause Mortality Rates per 100,000 population							
2023	1259.5 (1241.8-1277.2)	599.3 (595.2-603.4)	1122.8 (1088.2-1157.5)	1389.5 (1384.9-1394.1)	1168.3 (1166.8-1169.9)	859.9 (856.3-863.4)	541.9 (532.9-550.8)
2018	1169.6 (1151.4-1187.8)	571.1 (566.8-575.5)	996.4 (959.7-1,033.1)	1322.6 (1318.0-1327.3)	1128.4 (1126.8-1129.9)	784.4 (780.8-788.1)	502.7 (493.0-512.5)
2015#	1194.9 (1176.1-1213.6)	593.4* (588.7-598.2)	_	1300.5 (1295.7-1305.3)	1134.8 (1133.3-1136.4)	786.3 (782.3-790.2)	_
2010#	1213.2 (1191.4-1235.0)	639.8* (633.9-645.7)	_	1369.7 (1364.3-1375.0)	1137.0 (1135.4-1138.6)	837.1 (832.4-841.9)	_

Heart failure is indicated by codes ICD-10 I50.0, I50.1, I50.9. The parentheses represent 95% confidence intervals.

\* Non-Hispanic Asian or Pacific Islanders were aggregated together in prior data compilations. # Data were compiled on October 31, 2022. Other data were updated May 29, 2024; and 2023 data are provisional.

- Compared with the general US population, HF is associated with a loss of 7 to 15 years of median survival for adults 65-85 years of age (Figure 4).<sup>11</sup>
- Non-Hispanic Black patients have consistently had the highest HF mortality rate (Table 1). From 2010 to 2023, HF mortality increased for Black populations at a rate higher than any other racial or ethnic group (Figure 5).<sup>2</sup>
- HF mortality rates exhibit significant disparities between rural and urban areas. From 2011 to 2018 rural areas experienced a notably greater percentage increase in HF and cardiovascular mortality rates compared to urban areas.<sup>12</sup>
- Despite nearly 20% of the US population residing in rural areas, less than 10% of physicians practice in these regions, resulting in significant shortages of health professionals throughout rural America.<sup>13</sup>
- There is significant geographic variation across the US in HF death rates—the lowest reported in some West, Northwest, and Northeast states and the highest in some Midwest, South, and Southeast states (Figure 6).<sup>1,14-16</sup>
- Across all geographic regions, Black men and women experience higher age-adjusted mortality rates compared to White men and women.<sup>15</sup>
- HFrEF and HFpEF mortality trends vary based on study design and selection criteria. With an equal distribution of severity of HF across EF categories, the all-cause mortality rates appear to be comparable between EF categories.<sup>17</sup>

Figure 4: Survival Time Lost Compared to Median Population Survival in Male and Female Adult Patients Aged 65-69 After Index Heart Failure Hospitalization



Females with heart failure have excess life years lost after index HF hospitalization than males when compared with the median sex- and age-specific US life expectancy

Figure 5: Death Rates Related to HF in the US Between 1998-2023 According to Race Categories Defined by CDC

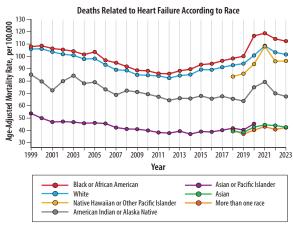
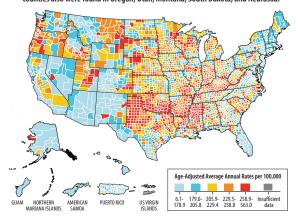


Figure 6: HF Death Rates in Adults Aged ≥35 Years by County Between 2018-2020

The map shows that concentrations of counties with the highest heart disease death rates are located primarily in Mississippi, Louisiana, Arkansas, Oklahoma, Texas, Kentucky, Tennessee, Indiana, Illinois, and Wisconsin. Pockets of high-rate counties also were found in Oregon, Utah, Montana, South Dakota, and Nebraska.





For more information visit https://hfsa.org/hf-stats



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