

# Heart Failure-Related Mortality Rates

## Declines in heart failure mortality that occurred from 1999 to 2012\*



HF was a contributing cause in 425,147 deaths in the US in 2021

# have been undone

# by increases from 2012 to 2023

\*Decline in age-adjusted mortality rate in the US

**Mortality rates have been increasing since 2012 despite advances in guideline-directed therapies in heart failure over the last decade**

In 2021, HF was a contributing cause of **425,147** deaths:

# 45%

of the 941,652 total CV deaths

# 13%

of the 3,279,857 total all-cause deaths

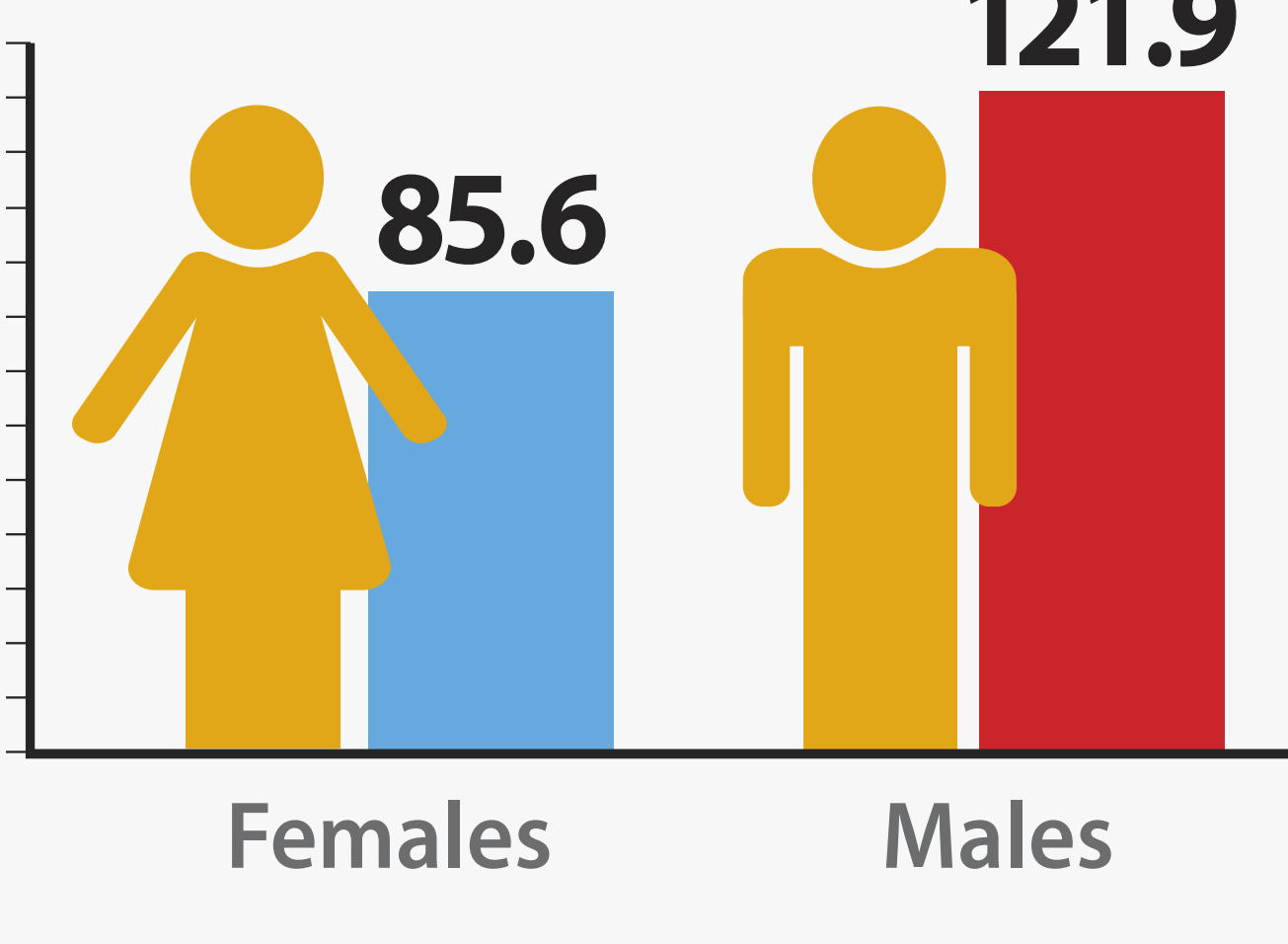
### Potential reasons for the increase in mortality rates:

- Lack of access to care by vulnerable populations
- Gaps in implementation of GDMTs and device therapies
- Increases in risk factors for HF such as obesity, diabetes, hypertension, and chronic kidney disease
- Improved survival of patients with ischemic heart disease and myocardial infarction which may result in myocardial dysfunction
- Increased exposure to cardiotoxic agent, environmental pollution
- Increased awareness of HF possibly leading to increases in attribution of death to HF on death certificates
- Changes in administrative coding

Although HF-related mortality rates remain higher in older adults (65-84 years) compared to younger adults (35-64 years), **there has been a more pronounced relative annual increase in HF-related mortality rates observed among young adults.**



**The greater rise in mortality rates among younger adults signifies a shift in the epidemiological landscape of HF.**



## Overall, females have a lower AAMR related to HF compared with males

Age-adjusted mortality rate per 100,000 persons with HF as an underlying or contributing cause, 2022

## Heart failure mortality rates vary by racial and ethnic groups in the US

Non-hispanic Black patients have consistently had the highest HF mortality rate

	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 <sup>#</sup>	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 <sup>#</sup>	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 <sup>#</sup>	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 <sup>#</sup>	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.

**From 2010 to 2023, HF mortality increased for Black populations at a rate higher than any other racial or ethnic group**



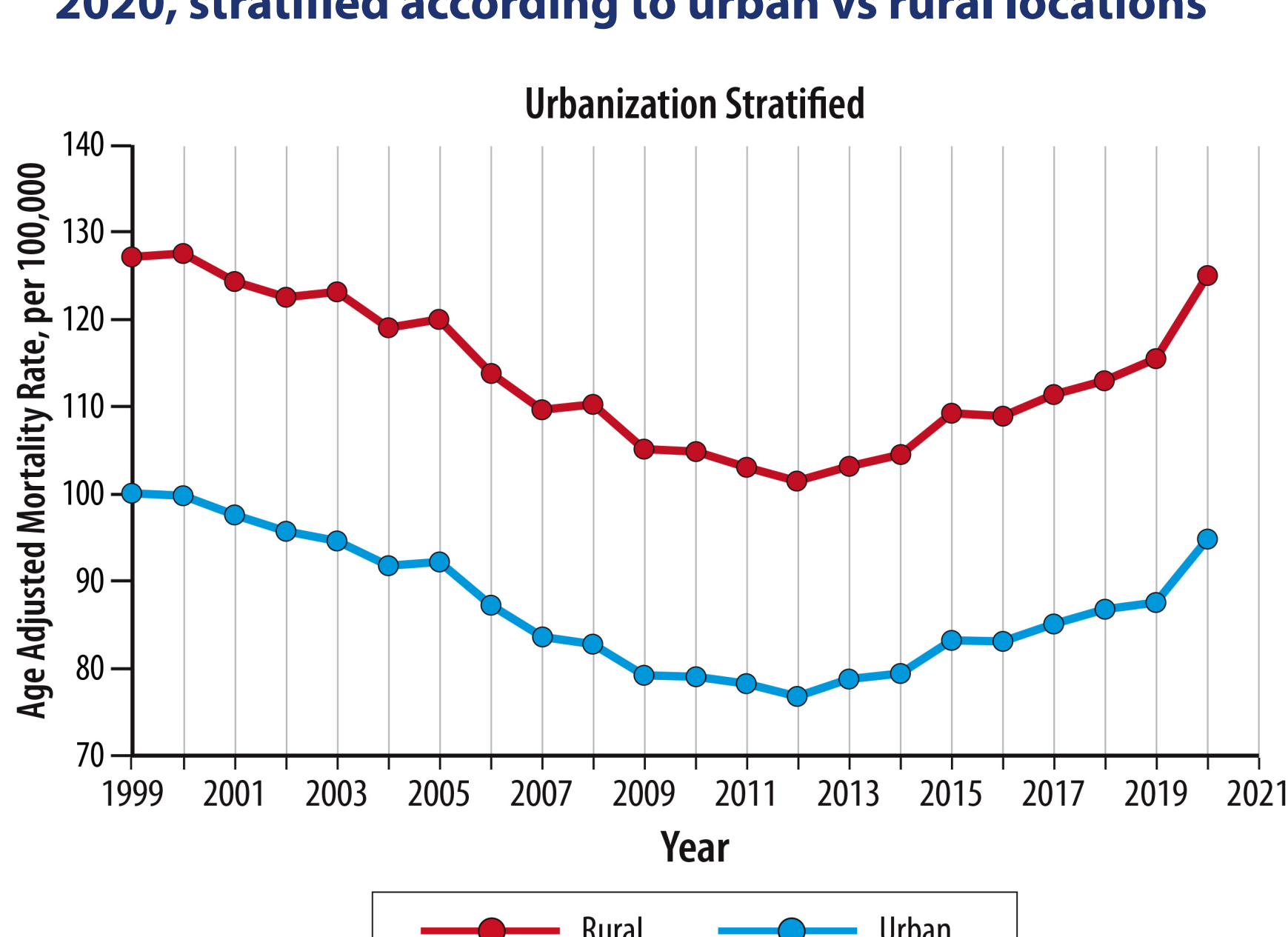
Among US patients 65 years and older hospitalized for HF, the **1-year post-discharge mortality rate is estimated at 35%**



**From 2011 to 2018 rural areas experienced a notably greater percentage increase in HF and cardiovascular mortality rates compared to urban areas.**

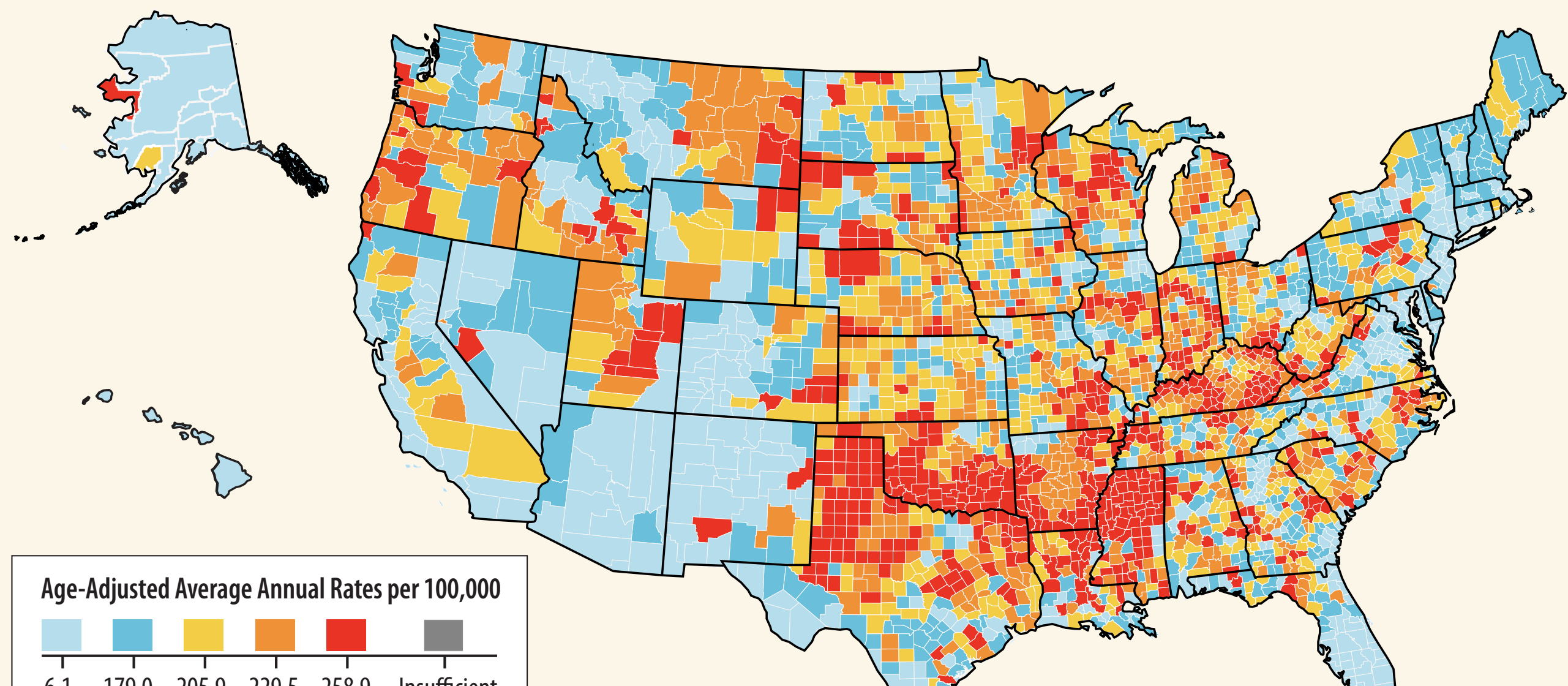


**AAMRs related to HF per 100,000 between 1999 and 2020, stratified according to urban vs rural locations**



**There is significant geographic variation across the US in HF death rates**

**HF Death Rates in Adults Aged ≥35 Years by County, 2018 to 2020**



Age-Adjusted Average Annual Rates per 100,000

6.1-178.9 179.0-205.8 205.9-229.4 229.5-258.9 258.9-563.0 Insufficient data

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.



# HF is associated with a loss of 7-15 years

# of median survival for adults 65-85 years of age compared with the general US population

All information, including graphics, tables, and text in this infographic are from the report published in the *Journal of Cardiac Failure*, and should be referenced as follows:

*J Card Fail.* 2025; 31 P66-116

