

Topline Global Trends, Risk Factors, Comorbidities, and Prediction of Future HF State

- Overall HF prevalence is increasing globally, but HF incidence, prevalence, etiology, and outcomes vary across different regions around the globe (Fig.1).
- HF prevalence estimates around the world range from 1% to 3% of the overall population (Fig. 1).

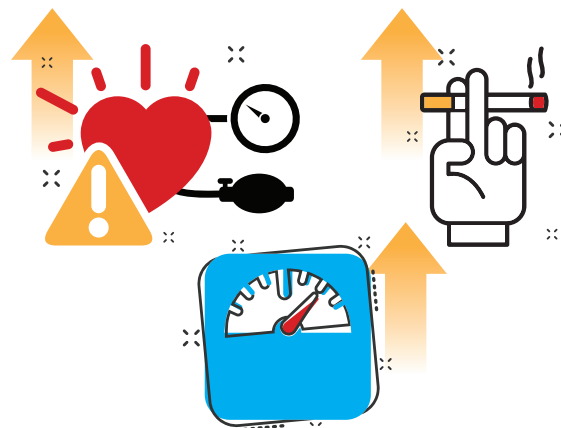
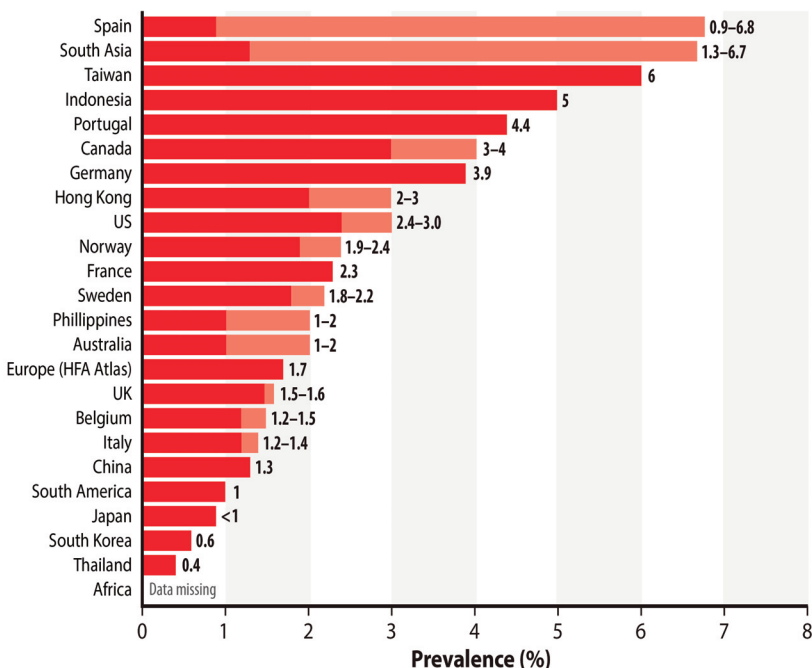


Figure 1: Worldwide Prevalence of Heart Failure¹



Values represent age-adjusted prevalence rates from different countries (for some countries a prevalence range is noted and data are derived from more than one study. Shades of color represent the ranges of prevalence.

HFA = Heart Failure Association; US = United States. *J Card Fail.* 2023; 29 P1412-1415.

- Disparities in social determinants of health (SDoH) and health inequities are important HF risk factors and result in increased mortality and other adverse outcomes in individuals at risk for HF or with HF.^{2,3}
- Worldwide, it is estimated that 56.2 million (95% confidence interval (CI) 46.4 to 67.8 million) people are living with HF.⁴
- Globally, HF prevalence is increasing (per the Global Burden of Disease [GBD] study, a 29.4% increase from 2010 to 2019 [95% CI 27.5-34.2]) and varies greatly by country (Fig.1).

- The prevalence of risk factors for HF including hypertension, obesity, and smoking are increasing globally over time. The proportion of individuals with HF exhibiting 3 or more comorbidities increased from 68% in 2002–2004 to 87% in 2012–2014.^{5–10}



- HF prevalence is reportedly lowest in countries such as Thailand, South Korea, Japan, and the Philippines ranging from 0.4% to 2.0% (Fig.1).
- Conversely, prevalence rates are highest for countries such as Spain, Taiwan, Indonesia, and Portugal ranging from 4.4% to 6.8% (Fig.1).



Table 1: Prevalence of HF by EF Classes Among Different Populations¹¹⁻¹⁷

	HFrEF EF <40%	HFmEF EF = 40-49%	HFpEF EF ≥50%
European Society of Cardiology (ESC) long-term registry (N= 9138) ¹¹	60%	24%	16%
Global Congestive Heart Failure Registry (G-CHF) (N=23,047) ¹²	54%	21%	24%
Asian Sudden Cardiac Death in Heart Failure Registry (ASIAN-HF) (N=6480) ¹³	81%	NR%	~16%
Japan (N=1245) ¹⁴	36%	21%	43%
HF in Five African Countries: INTERnational Congestive Heart Failure Study (INTER-CHF) Study (N=1294) ¹⁵	53.7%	30.1%	16.2%
China Hypertension Survey (N=338) ¹⁶	40%	23%	36%
Management of Cardiac Failure program in Northern Sydney Australia (n=5236) ¹⁷	47.8%	14.9%	37.4%

ASIAN-HF = Asian Sudden Cardiac Death in Heart Failure Registry; ESC = European Society of Cardiology; G-CHF = Global Congestive Heart Failure Registry; HF = heart failure; HFmEF = heart failure with mildly reduced ejection fraction; HFpEF = heart failure with preserved ejection fraction; HFrEF = heart failure with reduced ejection fraction; INTER-CHF = INTERnational Congestive Heart Failure Study; N = Total number of HF patients enrolled, NR = not reported. *J Card Fail.* 2023; 29 P1412-1415.

- Data are limited related to different phenotypes of HF according to ejection fraction (EF) classifications. Prevalence data drawn from different global databases for the 3 HF EF phenotypes are shown in **Table 4**.^{11-14, 16}
- Globally, leading risk factors for developing incident HF include advancing age, ischemic heart disease, hypertension, obesity, diabetes mellitus, and smoking.^{5,6-10}
- Ischemic etiology is more often identified as an underlying cause of HF than nonischemic etiology in Europe and North America (>50%), whereas nonischemic cardiomyopathy is identified as the most common cause in the Caribbean, sub-Saharan Africa, and Latin America.¹⁸
- Disparities in SDoH, including structural racism, inequities of living conditions, risk assessment and control, access to healthy food, insurance, care, and resources, and distributions of power and money impact an individual's health and HF risk across the globe in different regions of the world.²
- People living with HFrEF from the Asia-Pacific regions and Latin American region are 10 years younger compared with European and North Americans living with HFrEF.¹⁹
- In sub-Saharan Africa, more than one-half of the individuals with HF are under 55 years of age.¹⁹
- Ongoing research is identifying inflammatory signals and fibrosis markers, as well as genomic and proteomic risk factors for HF.²⁰⁻²²



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



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