HFSTATS SHEET

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



- Worldwide, it is estimated that approximately 60 million people are living with HF, and this number reflects those with an established diagnosis.¹
- Prevalence estimates around the world range from 0.37 to 6% (Figure 1).²⁻⁶



Figure 1: Worldwide Prevalence of Heart Failure

- Globally, HF prevalence is increasing. Per the Global Burden of Disease study, a 29.4% increase was noted globally from 2010 to 2019.
- The prevalence of HF varies globally. Approximately 69.2% of the world's HF population resides in low- and middle-income countries. The region with the highest age-standardized prevalence is in North America, while the lowest is in South Asia.^{2,4}



- The global prevalence of risk factors for HF including hypertension, obesity, and atrial fibrillation are increasing over time.
- Air pollution and increases in ambient temperature and other environmental factors are emerging risk factors.^{7,8}
- The demographics of patients with HF differ across the globe. Secular trends suggest that younger populations are at risk for HF and the proportion of younger individuals diagnosed with HF is increasing.
- The average age of individuals living with HFrEF in the Asia-Pacific regions, Middle East, and Latin America is approximately 10 years younger compared to those in Europe and North America.^{9,10}
- In sub-Saharan Africa, more than half the individuals with HF are under 55 years of age.¹¹
- It is difficult to determine whether this earlier onset is attributable to improved awareness of HF, or whether there are other biological or epidemiological factors playing a role, but nevertheless, it underscores that HF is not limited to older individuals.

Table 1: Prevalence of HF by EF Classes Among Different Populations

	HFrEF EF <40%	HFmEF EF = 40-49%	HFpEF EF ≥50%
European Society of Cardiology (ESC) long-term registry (n=9138)	60%	24%	16%
Global Congestive Heart Failure Registry (G-CHF) (n=23,047)	54%	21%	24%
Asian Sudden Cardiac Death in Heart Failure Registry (ASIAN-HF) (n=6480)	81%	NR	~16%
Japan (n=1245)	36%	21%	43%
HF in Five African Countries: INTERnational Congestive Heart Failure Study (INTER-CHF) Study (n=1294)	53.7%	30.1%	16.2%
China Cardiovascular Association Database $-$ Heart Failure Registry (n=230,637)	35.6%	20.6%	43.8%
Management of Cardiac Failure program in Northern Sydney Australia (n=5236)	47.8%	14.9%	37.4%
Haiti Cardiovascular Cohort (n=93 among 2981 in CVD Cohort)	71%	6.5%	22.6%

- Data are limited related to different phenotypes of HF according to EF classifications. Prevalence data drawn from different global databases for 3 HF phenotypes by LVEF are shown in Table 1.¹²⁻¹⁹
- Globally, leading risk factors for developing incident HF include advancing age, ischemic heart disease, hypertension, obesity, diabetes mellitus, atrial fibrillation and smoking.²⁰⁻²⁴
- Risk factors vary according to age, race, ethnicity, and HF subtype.^{20,21,25} For example:
 - in Southeast Asia, despite a lower prevalence of overweight/obesity, diabetes is a notable risk factor for HF
 - HF risk attributable to hypertension is greater within Black populations worldwide.²²
- In the analysis of the GBD dataset of 204 countries, the top etiologies of HF in men and women were ischemic, hypertensive, and rheumatic heart disease.²
 - the exception is Latin America, where nonischemic cardiomyopathy due to Chagas disease is the leading etiology of heart failure
 - In South Asia, heart anomalies are a leading cause of heart failure

- Between 1990 and 2019, among all global regions and both sexes, there was an increase in HF associated with non-rheumatic degenerative valve disease.²
- Nontraditional risk factors, including SDoH are known to impact global HF trends. Among the 204 countries included in the GBD dataset analysis, greater HF prevalence was associated with a higher socioeconomic deprivation index.²



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

References:

- 1. Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet* (London, England) Oct 17 2020;396(10258):1204–22.
- 2. Wei S, Miranda JJ, Mamas MA, Zuhlke LJ, Kontopantelis E, Thabane L, et al. Sex differences in the etiology and burden of heart failure across country income level: analysis of 204 countries and territories 1990-2019. *Eur Heart J Qual Care Clin Outcomes* 2023 Nov 2;9(7):662–72.
- 3. Savarese G, Becher PM, Lund LH, Seferovic P, Rosano GMC, Coats A. Global burden of heart failure: A comprehensive and updated review of epidemiology. *Cardiovasc Res* 2023 Jun 13;119(6):1453.
- 4. Shahim B, Kapelios CJ, Savarese G, Lund LH. Global public health burden of heart failure: An updated review. Card Fail Rev 2023;9:e11.
- 5. Bellanca L, Linden S, Farmer R. Incidence and prevalence of heart failure in England: a descriptive analysis of linked primary and secondary care data-the PULSE study. *BMC Cardiovasc Disord* 2023 Jul 26;23(1):374.
- 6. Ruiz-García A, Serrano-Cumplido A, Escobar-Cervantes C, Arranz-Martínez E, Turegano-Yedro M, Pallares-Carratala V. Heart failure prevalence rates and its association with other cardiovascular diseases and chronic kidney disease: SIMETAP-HF study. *J Clin Med* 2023 Jul 26;12(15):4924.
- 7. Feng J, Zhang Y, Zhang J. Epidemiology and burden of heart failure in Asia. JACC Asia Apr 2024;4(4):249–64.
- 8. Jia Y, Lin Z, He Z, Li C, Zhang Y, Wang J, et al. Effect of air pollution on heart failure: systematic review and meta-analysis. *Environ Health Perspect* 2023 Jul;131(7):76001.
- 9. Groenewegen A, Rutten FH, Mosterd A, Hoes AW. Epidemiology of heart failure. Eur J Heart Fail 2020 Aug;22(8):1342–56.
- 10. Elasfar AA, Alhabeeb W, Elasfar S. Heart failure in the Middle East Arab Countries: Current and future perspectives. *J Saudi Heart Assoc* 2020;32(2):236–41. 0.
- 11. Agbor VN, Essouma M, Ntusi NAB, Nyaga UF, Bigna JJ, Noubiap JJ. Heart failure in sub-Saharan Africa: A contemporaneous systematic review and meta-analysis. Int J Cardiol Apr 15 2018;257:207–15.
- 12. Chioncel O, Lainscak M, Seferovic PM, Anker SD, Crespo-Leiro MG, Harjola VP, et al. Epidemiology and one-year outcomes in patients with chronic heart failure and preserved, mid-range and reduced ejection fraction: an analysis of the ESC Heart Failure Long-Term Registry. *Eur J Heart Fail* 2017 Dec;19(12):1574–85.
- 13. Joseph P, Dokainish H, McCready T, Budaj A, Roy A, Ertl G, et al. A multinational registry to study the characteristics and outcomes of heart failure patients: The global congestive heart failure (G-CHF) registry. *Am Heart J* 2020 Sep; 227: 56–63.
- 14. MacDonald MR, Tay WT, Teng TK, Anand I, Ling LH, Yap J, et al. Regional var-iation of mortality in heart failure with reduced and preserved ejection fraction across Asia: outcomes in the ASIAN-HF Registry. *J Am Heart Assoc* 2020 Jan 7;9(1):e012199.
- 15. Shiga T, Suzuki A, Haruta S, Mori F, Ota Y, Yagi M, et al. Clinical characteristics of hospitalized heart failure patients with preserved, mid-range, and reduced ejection fractions in Japan. ESC Heart Fail Jun 2019;6(3):475–86.
- 16. Karaye KM, Dokainish H, ElSayed A, Mondo C, Damasceno A, Sliwa K, et al. Clinical Profiles and Outcomes of Heart Failure in Five African Countries: Results from INTER-CHF Study. *Glob Heart* 2021;16(1):50.
- 17. Wang H, Li Y, Chai K, Long Z, Yang Z, Du M, Wang S, et al. Mortality in patients admitted to hospital with heart failure in China: a nationwide Cardiovascular Association Database-Heart Failure Centre Registry cohort study. *Lancet Glob Health* Apr 2024;12(4):e611–22.
- 18. Wang N, Hales S, Barin E, Tofler G. Characteristics and outcome for heart failure patients with mid-range ejection fraction. *J Cardiovasc Med* (Hagerstown) 2018 Jun;19(6):297–303.
- 19. Kingery JR, Roberts NL, Lookens Pierre J, Sufra R, Dade E, Rouzier V, et al. Popula-tion-Based Epidemiology of Heart Failure in a Low-Income Country: The Haiti Cardiovascular Disease Cohort. *Circ Cardiovasc Qual Outcomes* 2023 Feb;16(2): e009093.
- 20. Ho JE, Enserro D, Brouwers FP, Kizer JR, Shah SJ, Psaty BM, et al. Predicting heart failure with preserved and reduced ejection fraction: the international collaboration on heart failure subtypes. *Circ Heart Fail* 2016 Jun;9(6):e003116. https://doi.org/10.1161/CIRCHEARTFAILURE.115.003116.
- 21. Kalogeropoulos A, Georgiopoulou V, Kritchevsky SB, Psaty BM, Smith NL, Newman AB, et al. Epidemiology of incident heart failure in a contemporary elderly cohort: the health, aging, and body composition study. *Arch Intern Med* 2009 Apr 13;169 (7):708–15.
- 22. Khatibzadeh S, Farzadfar F, Oliver J, Ezzati M, Moran A. Worldwide risk factors for heart failure: a systematic review and pooled analysis. *International journal of cardiology* Sep 30 2013;168(2):1186–94.
- 23. Yan T, Zhu S, Yin X, et al. Burden, trends, and inequalities of heart failure globally, 1990 to 2019: A secondary analysis based on the global burden of disease 2019 study. *J Am Heart Assoc* Mar 21 2023;12(6):e027852.
- 24. Walli-Attaei M, Joseph P, Johansson I, Sliwa K, Lonn E, Maggioni AP, et al. Charac-teristics, management, and outcomes in women and men with congestive heart fail-ure in 40 countries at different economic levels: an analysis from the Global Congestive Heart Failure (G-CHF) registry. *Lancet Glob Health* Mar 2024;12(3): e396–405.
- 25. Chamberlain AM, Boyd CM, Manemann SM, Dunlay SM, Gerber Y, Killian JM, et al. Risk factors for heart failure in the community: differences by age and ejection fraction. *Am J Med* 2020 Jun;133(6):e237–48.

All information, including graphics, tables, and text in this fact sheet are from the report published in the *Journal of Cardiac Failure*, and should be referenced as follows: *J Card Fail*. 2025; 31 P66-116



