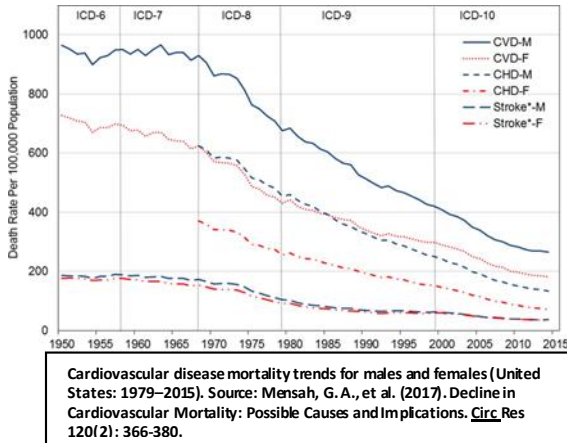




CARDIOVASCULAR DISEASE: WOMEN'S NO. 1 HEALTH THREAT

OVERVIEW

Cardiovascular diseases (CVD) is the No. 1 cause of death in American women, claiming over 400,000 lives each year, or one death every 80 seconds.¹ CVD kills approximately the same number of women as all forms of cancer, chronic lower respiratory disease and diabetes combined.² In 2014, one in 32 female deaths was from breast cancer, but one in three was from cardiovascular disease.² Unfortunately, the statistics are even worse when race and age are considered. The prevalence of CVD among African-American women (nearly 48%) is much higher than among Caucasian women (35%).¹ For the past 3 decades, dramatic declines in CVD mortality for women have been observed.^{1,3} However, recent data suggest stagnation in the improvements in CVD mortality for women.³



CVD is largely preventable. Nearly 75% of coronary heart disease cases in women can be prevented with better lifestyle choices, such as not smoking, exercising, and eating a healthy diet.⁴ In an analysis of more than 161,000 women participating in the Women's Health Initiative, 83% of the women were either classified as being "high risk" or "at risk" for CVD and an additional 13% of the women lacked risk factors for CVD but did not adhere to a healthy lifestyle.⁵ But prevention is hindered by the fact that many women and their health care providers don't realize that CVD is a woman's No. 1 health threat. The American Heart Association (AHA) is working to close this knowledge gap through education and advocacy.

RAISING AWARENESS

- A 2012 survey conducted by the AHA found that only 56% of women were unaware that heart disease is the leading cause of death among women, although awareness has nearly doubled since 1997.⁶
- Furthermore, only 36% of black women and 34% of Hispanic women knew that heart disease is their leading cause of death, compared to 65% of white women.⁶
- Less than 25% of women can name hypertension and high cholesterol as risk factors for heart disease, and less than 50% know the major symptoms of heart disease.⁷
- Only 65% of women said the first thing they would do if they thought they were having a heart attack was to call 9-1-1.⁶
- Black and Hispanic women are less likely than white women to be aware of heart attack symptoms.⁸

DISPARITIES IN RISK FACTORS

- Women are significantly less likely than men to meet the Federal Guidelines for Physical Activity.⁹
- Women have a 25% increased risk for coronary artery disease conferred by cigarette smoking compared to men.¹⁰
- Women with diabetes are 44% more likely to develop CVD than men with diabetes.¹¹
- Certain risk factors such as high blood pressure and diabetes increase heart attack risk in women more severely than in men.¹²
- Women are more likely than men to be obese.¹³
- Several female reproductive factors, including early menarche, early menopause and miscarriage, are associated

**Cardiovascular Disease: Women's No. 1 Health Threat**

with an increased risk for CVD.¹⁴

- The percentage of non-elderly women who were uninsured fell from 16.1% in 2010 to 9.3% in 2015, a 42% decrease, which means there are still millions of uninsured women.³

DISPARITIES IN CVD RESEARCH, TREATMENT, DIAGNOSIS, AND MORTALITY

- Women of color are disproportionately affected by heart disease; the death rate was 25% higher for black women than for white women in 2015.³
- Women are 1.5 times less likely than men to be referred to cardiac rehabilitation.¹⁵
- Due to such patient-level barriers as multiple comorbidities, lack of social support, and family responsibilities, women are less likely than men to adhere to prescribed cardiac rehabilitation sessions.^{16,17}
- Women are more likely than men to die within 1 or 5 years of suffering a heart attack, particularly if they are African-American.¹
- Women are more likely than men to be diagnosed with heart failure within 5 years of their first heart attack, particularly if they are African-American.¹
- Young women with acute coronary syndrome are more likely than men to have adverse outcomes, including death, heart attack, stroke, or re-hospitalization, even after adjusting for age differences.¹⁸
- Among Medicare patients, men are two to three times more likely than women to receive an implantable cardioverter-defibrillator for the prevention of sudden cardiac death.¹⁹
- Women with CVD are less likely than men to receive statins for cholesterol care, and are less likely to achieve ideal cholesterol recommendations.^{20,21}
- Women have been underrepresented in clinical trials, generally making up only about 20% of enrolled patients, even though women represent 40% to 50% of participants in longitudinal studies and registries.¹²

ASSOCIATION ADVOCATES

The nation has made remarkable progress in reducing the overall rates of death and disability from CVD in men. Realizing a comparable level of improvement for women requires the concerted efforts of everyone.

- The AHA applauds the Food and Drug Administration's Action Plan to Enhance the Collection and Availability of Demographic Subgroup Data, which was required by Congress as a result of the association's work on the HEART for Women Act. The AHA is now working to monitor and ensure implementation of the 27 steps FDA proposes in the Action Plan.
- AHA supports requiring equitable use of female cells, tissues, and animals in basic research supported by the National Institutes of Health.
- AHA supports legislation to address barriers to cardiac rehabilitation for women (S. 1361/H.R. 1155).
- The AHA supports maintaining funding for the WISEWOMAN program, which provides free CVD screening and lifestyle counseling to low income uninsured or under-insured women.
- AHA supports improved reporting of health care data by sex, race, and ethnicity.
- AHA is working to defend and strengthen the Affordable Care Act, which is making health insurance more accessible and affordable for women as well as men.

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⁶ Mosca, L., et al. (2013). Fifteen-year trends in awareness of heart disease in women: results of a 2012 American Heart Association national survey. *Circulation* 127(11): 1254-1263, e1251-1229.

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¹³ Flegal, K.M., et al. (2016). Trends in Obesity Among Adults in the United States, 2005 to 2014. *JAMA* 315(21): 2284-2291.

¹⁴ Peters, S.A. and M. Woodward (2018). Women's reproductive factors and incident cardiovascular disease in the UK Biobank. *Heart*.

¹⁵ Colella, T.J., et al. (2015). Sex bias in referral of women to outpatient cardiac rehabilitation? A meta-analysis. *Eur J Prev Cardiol* 22(4): 423-441.

¹⁶ Oosenbrug, E., et al. (2016). Sex Differences in Cardiac Rehabilitation Adherence: A Meta-analysis. *Can J Cardiol* 32(11): 1316-1324.

¹⁷ Supervia, M., et al. (2017). Cardiac Rehabilitation for Women: A Systematic Review of Barriers and Solutions. *Mayo Clin Proc*.

¹⁸ Gupta, A., et al. (2014). Trends in acute myocardial infarction in young patients and differences by sex and race, 2001 to 2010. *J Am Coll Cardiol* 64(4): 337-345.

¹⁹ Sahni, S. and G.C. Fonarow (2014). Gender Bias Trends in Implantable Cardioverter-Defibrillator Therapy. *Current Cardiovascular Risk Reports* 8(3): 375.

²⁰ Virani, S.S., et al. (2015). Gender disparities in evidence-based statin therapy in patients with cardiovascular disease. *Am J Cardiol* 115(1): 21-26.

²¹ Schoen, M.W., et al. (2016). Comparison of Adherence to Guideline-Based Cholesterol Treatment Goals in Men Versus Women. *Am J Cardiol* 117(1): 48-53.