

Heart Health: What All Women Need to Know



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health issue.

Editor's note: The recent death of Star Wars actress Carrie Fisher from cardiac arrest shined a light on the topic of heart disease in women. Heart disease is usually associated with older males, yet more women than men die of heart disease every year and heart attacks among younger women are on the rise. In this month's blog, Graybill Cardiologist [Dr. Kandan Baban](#), will discuss heart disease in women and what women of all ages can do to lower their risks for this major

In the United States, heart disease is leading killer of men and women, claiming 610,000 lives every year. Heart disease is often thought of as an "old man's" disease, and by far, most sudden cardiac events occur in men.¹

However, even though heart disease is the cause of death for one in four women, *women's heart disease remains largely misunderstood*. For example, a study in the journal *Circulation* found that over half (54%) of women surveyed were not aware that heart disease was the leading cause of death of women.¹ In another example, a study of young female heart attack survivors found that participants had not recognized their personal risk of heart disease despite a family history of heart disease.²



More and more women are becoming aware of their risk of heart disease

The following facts reported by the Centers for Disease Control & Prevention may surprise you:

- Every 80 seconds a woman dies from heart disease.³
- An estimated 6.6 million women in the U.S. have coronary heart disease.³

- Heart disease kills more women than all cancers combined.³
- Approximately 1 in 31 deaths of women is attributable to breast cancer, whereas 1 in 7.5 female deaths is attributable to coronary heart disease.³
- Women are 50% more likely to be misdiagnosed after a heart attack.³
- Ninety percent of women have one or more risk factors for developing heart disease or stroke. The more risk factors a woman has, the higher her chances of developing disease.³
- Two out of three women who die suddenly from coronary heart disease have no prior symptoms.⁴

What is heart disease?



Atherosclerosis is the underlying factor in CHD

Heart disease is a general term for diseases of the heart and blood vessels. Although there are many types of heart disease, the most common form is [coronary heart disease \(CHD\)](#). CHD is also referred to as [coronary artery disease \(CAD\)](#).

The underlying factor in CHD is a condition called [atherosclerosis](#). Also called "hardened arteries," atherosclerosis results from the buildup over a long time of a

substance called [plaque](#), which is mostly cholesterol and fat, in the coronary arteries that supply blood, oxygen and nutrients to the heart. Atherosclerosis can cause various cardiac events such as chest pain, heart failure, arrhythmias, or heart attacks.

Women's heart attack symptoms

Popular culture has shaped our perceptions of what a heart attack should "look like." It's a familiar scene in movies or television: the actor, suddenly feeling pain, clutches his chest and cries out before succumbing to "the big one." While some women do experience the classic "Hollywood" heart attack, they are also as likely to experience symptoms that are more subtle or that mimic other conditions, such as acid reflux or the flu.

Women are more likely than men to experience:

- Uncomfortable pressure, squeezing, fullness or pain in the center of your chest. It lasts more than a few minutes, or goes away and comes back.
- Pain or discomfort in one or both arms, the back, neck, jaw or stomach.
- Shortness of breath with or without chest discomfort.
- Other signs such as breaking out in a cold sweat, nausea or lightheadedness.⁵

Women's heart attack symptoms are often not taken seriously or even misdiagnosed. According to the study of younger female heart attack survivors:²

- They took into account multiple considerations--such as family and work responsibilities--in deciding when and how to respond to their symptoms
- In some instances, the initial evaluation of symptoms was *negative* for heart conditions and multiple interactions were required to make a diagnosis of heart attack.



Women's heart attack symptoms are often mistaken for less serious conditions

These misconceptions can cause delays in getting female heart attack victims the care they really need. ***Minutes count when it comes to heart attack. If you have been diagnosed with heart disease and experience any of these symptoms, call 9-1-1 immediately!***

Risk factors for CHD

Most [heart disease risk factors](#) are common to both men and women. Some risk factors are experienced differently by women and some are unique to women.

Smoking. The chemicals in tobacco can cause major damage to your entire cardiovascular system (heart, blood vessels, and blood cells) as well as other organ throughout your body. This damage increases the chances of developing atherosclerosis and CHD. Smoking also is a major risk factor for peripheral artery disease, a condition in which plaque builds up in the arteries that carry blood to the head, other organs, and limbs.

Uncontrolled [high blood pressure](#), or hypertension is a risk factor for heart attack, stroke, aneurysm, chronic kidney disease, eye damage, and memory loss. High blood pressure affects about 75 million (1 in 3) adults in the U.S. High blood pressure has no symptoms and many people don't know they have it. Only half of people with high blood pressure have it under control.⁶

- Pregnant women who are 1) pregnant for the first time, 2) teenagers, or 3) over age forty are at increased risk to develop [preeclampsia](#), a condition characterized by high blood pressure and protein in their urine. Women who experienced preeclampsia have double the chance of developing heart disease than women who didn't have preeclampsia. The more severe the preeclampsia, the greater the risk for heart disease.⁷

Diabetes. About 29 million adults in the U.S. have [type 2 diabetes](#) and another 54 million adults are pre-diabetic, meaning they are at very high risk to develop type 2 diabetes. One in four people with diabetes don't know they're diabetic. Because multiple risk factors for diabetes (high lipids levels, high blood pressure, abdominal obesity) overlap with those of heart disease, and many people suffer from both.

- Having diabetes places a woman at very high risk for a heart attack.⁸
- At least 68 percent of people age 65 or older who have diabetes die from some form of heart disease.⁹
- Women with diabetes are 2 times more likely to have a second heart attack and 4 times more likely to have heart failure than women without diabetes.⁹

Obesity. Obesity raises blood [cholesterol](#) and [triglyceride](#) levels, increases blood pressure, and contributes to diabetes. Obese people are more likely to develop heart disease than people who have a normal body weight.

- **Abdominal obesity.** *Where* a person carries excess fat matters. People who carry excess fat around their abdomen (i.e., are "apple-shaped") face a higher risk of heart disease than those who carry excess weight around their hips (i.e., are "pear-shaped").

- **Yo-yo dieting.** A recent study funded by the National Heart Lung and Blood Institute found that repeatedly losing and regaining weight, known as weight cycling or yo-yo dieting may increase death from heart disease in postmenopausal women even if they weren't overweight.¹⁰

Inflammation. Elevated levels of C-reactive protein (an indicator of inflammation) are beginning to emerge as a [predictor of heart disease](#) in women. The theory is that plaque damages the arterial wall, releasing inflammatory chemicals. A study by the American Heart Association found CRP to be a significantly better predictor of heart disease among apparently healthy middle-aged women.¹¹

Reproductive issues and menopause. Women who have not experienced menopause have a lower risk of heart disease than men, possibly due to the protective effects of the hormone estrogen. After menopause, estrogen levels drop quickly, and the risk of CHD becomes about equal for men and women.

- **Birth control pills** have been linked with high blood pressure, especially in women who are overweight, have kidney disease, or have a family history of hypertension. Younger women who take birth control pills and smoke, face a twenty percent high risk of heart disease than those non-smokers.¹²
- **Early menopause.** Women who experience early menopause (prior to age 46) due to medical treatments or removal of their ovaries are twice as likely to develop CHD as women of the same age who aren't yet menopausal.¹³

Lowering your risk for CHD

The U.S. Centers for Disease Control and Prevention estimates that *eighty percent of deaths from heart disease (about 200,000 per year) could be prevented* with healthy lifestyle changes. The American Heart Association and American Stroke Association have identified "[Life's Simple 7](#)", a list of seven simple lifestyle changes that can dramatically lower your risk of heart disease and improve your overall health.

1. Quit smoking

2. Maintain a healthy weight
3. Engage in regular physical activity
4. Eat a healthy diet
5. Manage blood pressure
6. Manage cholesterol
7. Keep blood sugar levels healthy

Annual Well Woman exam. Multiple studies point out that women--as the traditional family caretakers--are more likely to put off their own healthcare needs. For example, a recent study by the Commonwealth Fund concluded that women face more obstacles than men getting to the doctor--such as lack of time, inability to take time off work, and childcare issues--and are therefore more likely to delay seeing their healthcare providers.¹⁴



**Your Primary Care Physician
can work with you to keep
your heart healthy**

If at all possible, do not skip this all important exam! It provides the opportunity for your primary care physician (PCP) to assess your health status, including your risk for heart disease. Your PCP will then work with you to take control of your health, by advising healthy lifestyle changes, prescribing medication, or referring you to cardiologist (a physician specializing in heart health).

Sources:

1. Roger VL, Go AS, Lloyd-Jones DM, et al. Heart disease and stroke statistics-2012 update: a report from the American Heart Association. *Circulation*. 2012;125(1):e2-220.
2. Mosca L, Mochari-Greenberger H, Dolor RJ, et al. Twelve year follow-up of American women's awareness of cardiovascular disease risk and barriers to heart health. *Circulation: Cardiovas Qual Outcomes*. 2010;3:120-7.

3. Lichtman, JH, Leifheit-Limson, EC, Watanabe E, et al. Symptom recognition and healthcare experiences of young women with acute myocardial infarction. *Cir Cardiovas Qual Outcomes*. 2015Mar;8(2 Suppl 1):S31-8.
4. U.S. Centers for Disease Control and Prevention, "Women and Heart Disease Fact Sheet." Available at https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_women_heart.htm. Retrieved 5/4/17.
5. American Heart Association, "Heart attack signs in women". Available at http://www.heart.org/HEARTORG/Conditions/HeartAttack/WarningSignsofaHeartAttack/Heart-Attack-Symptoms-in-Women_UCM_436448_Article.jsp#.WQ0Nv7nn9G8. Retrieved 5/4/17.
6. Merai R, Siegel C, Rakotz M, Basch P, Wright J, Wong B; DHSc., Thorpe P. CDC Grand Rounds: a public health approach to detect and control hypertension. *MMWR Morb Mortal Wkly Rep*. 2016 Nov 18;65(45):1261-1264.
7. *Health Alert*: Preeclampsia may be associated with heart disease and stroke later in life. Preeclampsia Foundation. Available at <https://www.preeclampsia.org/health-information/heart-disease-stroke>. Retrieved 5/4/17.
8. U. S. Centers for Disease Control and Prevention. National Diabetes Fact Sheet. Available at <https://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf>. Retrieved 5/4/17.
9. National Institute of Diabetes and Digestive and Kidney Diseases. Diabetes, heart disease and stroke. Available at <https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems/heart-disease-stroke>. Retrieved 5/8/17.
10. American Heart Association. "Yo-yo dieting dangerous even if you're not overweight." ScienceDaily, 15 November 2016. Available at www.sciencedaily.com/releases/2016/11/1611150829.htm. Retrieved 5/4/17.
11. Ridker PJM, Burning JE, et al. Prospective study of C-reactive protein and the risk of future cardiovascular events among apparently healthy women. *Circulation*. 1998;98:731-733
12. Birth control and heart disease. Available at https://www.goredforwomen.org/know-your-risk/birth_control_pregnancy_heart_disease/birth-control-and-heart-disease/. Retrieved 5/8/17.
13. Wellons M, Ouyang P, Schreiner PJ, et al. Early menopause predicts future coronary heart disease and stroke: the Multi-Ethnic Study of Atherosclerosis. *Menopause*. 2012 Oct;19(10):1081-7.
14. Rustgi SD, Doty MM, Collins SR. Women at risk: why many women are forgoing needed health care. *Issue Brief (Commonw Fund)*. 2009 May;52:1-12.

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