

THE COMPLETE GUIDE TO

WOMEN'S HEART HEALTH



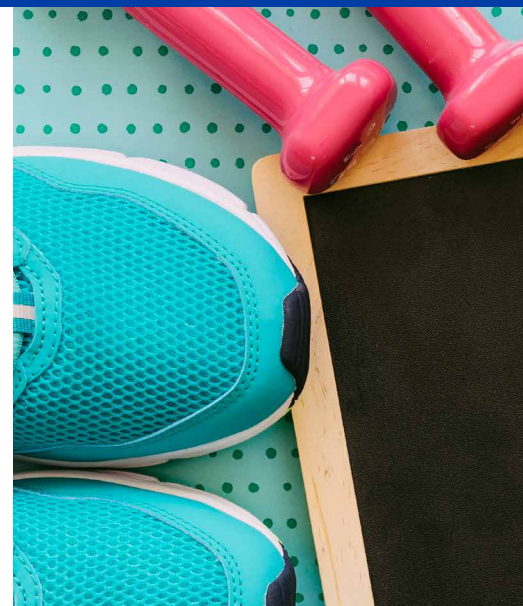
What every woman should know about causes, symptoms, diagnosis and treatment of heart disease



WOMEN'S HEART HEALTH

Heart disease: it's deadlier than all forms of cancer combined — and yet many women don't even know they're at risk.

Though it's often seen as a man's disease, [heart disease has actually killed more women than men](#) annually since 1989, according to the American Heart Association. Additionally, women have a higher lifetime risk of stroke than men and are less likely to survive their first heart attack.



“Compared to men, women with coronary artery disease have more adverse outcomes such as delays in getting care by emergency medical services, increased rates of pre-hospital cardiac arrest and a greater likelihood of dying when hospitalized for major heart attacks,”

- Beaumont cardiologist Kavitha Chinnaiyan, M.D.



Is heart disease really different in women? The answer is yes. It's the [leading cause of death for black and white women](#) in the United States, according to the Centers for Disease Control and Prevention, and among Hispanic women, heart disease and cancer cause roughly the same amount of deaths each year.

Heart Disease Symptoms in Women

Sixty-four percent of women who die suddenly of coronary heart disease have no previous symptoms, according to the American Heart Association.

For many men and women, heart disease symptoms are typical:

- chest pain
- tightness
- heaviness
- chest discomfort

It's exactly what the media and many well-meaning campaigns have conditioned us to believe—that the telltale sign of a heart attack is extreme chest pain. But in reality, for many women heart disease symptoms are more likely to include these atypical symptoms:

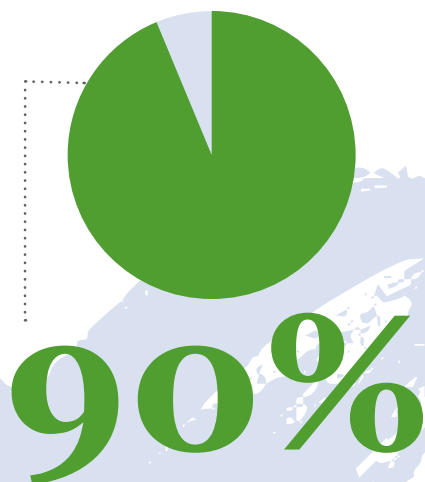
- shortness of breath
- nausea and vomiting
- dizziness
- severe fatigue
- pain in the neck, jaw, throat, upper abdomen or back

Because these atypical symptoms can be indicative of other illnesses, they're often misunderstood by patients and physicians. Many



women won't seek timely medical attention, and when they do, they may receive a delay in diagnosis or even a misdiagnosis.

Even if you don't have or don't recognize these symptoms, you may still be at risk. Women, especially smokers, those who are menopausal or postmenopausal, and those with high blood pressure, high cholesterol, and diabetes, should watch for typical and atypical symptoms and talk to their doctors about detection and prevention.



90%
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Risk Factors for Heart Disease

Certain lifestyle choices and habits, as well as genetic traits and conditions, may raise your risk for coronary heart disease. If you already have the disease, these risk factors can increase the chance of it worsening.

In general, women and men have the same heart disease risk factors. However, some factors play a bigger role in the development of heart disease in women than they do in men. For example, [diabetes raises the risk for heart disease in women](#) more so than in men, according to the National Heart, Lung and Blood Institute, a division of the US Department of Health & Human Services. Also, some risk factors affect only women, such as birth control pills and menopause.

A person's risk for heart disease increases with the number and severity of risk factors he or she has. The more risk factors a person has, and the more severe those risks are, the higher likelihood they have of developing and dying from heart disease.

Although the American Heart Association reports that **90 percent of women are living with one or more heart disease risk factors**, most heart disease events can be prevented by lifestyle changes and education.

Risk Factors That Can Be Controlled

- cigarette smoking and exposure to secondhand smoke
- high blood pressure
- high cholesterol
- physical inactivity
- obesity or overweight
- diabetes
- metabolic syndrome
- birth control pills
- unhealthy diet
- stress and depression
- anemia
- sleep apnea

Risk Factors That Cannot Be Controlled

- age (55+ for women; 45+ for men)
- menopause
- family history
- preeclampsia

A woman's risk for heart disease also tends to increase if she misses regular check-ups with her physician, if she ignores her own medical needs while caring for others, and if she is uneducated about her chances of having it.

Tests/Procedures for Diagnosing Heart Disease

No single test can diagnose coronary heart disease. Instead, your doctor will rely on your medical and family histories, risk factors, a physical exam and the results from diagnostic tests and procedures.

Those tests could include one or more of the following:

Blood tests: Blood tests record the levels of certain fats, cholesterol, electrolytes, sugar and proteins in your blood. Abnormal levels may indicate that you're at risk for heart disease or that you're already experiencing heart failure.

Chest X-ray: A chest X-ray may be used to take pictures of the inside of your chest, showing the location, size and shape of your heart, lungs and blood vessels. The size of the organs, as well as fluid in your lungs or around your heart, may indicate heart failure.

Electrocardiogram (ECG/EKG): An electrocardiogram monitors your heart's electrical activity and records how fast the heart is beating and whether or not its rhythm is steady or irregular. By recording the strength and timing of the electrical signals as they pass through your heart, an ECG can reveal evidence of a previous heart attack or one that's in progress.

Echocardiogram: An echocardiogram uses sound waves to create a picture of your heart. In addition to outlining the heart's shape and size, it can show areas of poor blood flow and damaged heart muscle.

Exercise stress test: Paired with either an electrocardiogram or echocardiogram, a stress test can show abnormal changes in your heart rate and blood pressure and record abnormal changes in your heart's electrical activity and rhythm with exertion. An exercise stress test can help doctors monitor your shortness of breath and chest pain, if you sometimes experience either while exercising or after moderate activity.

Cardiac catheterization or angiogram: This procedure allows doctors to view blood flow through your heart with the help of a special dye that's injected into your arteries. X-rays are taken during the procedure, which help doctors to pinpoint narrow and blocked areas. If treatment is required, doctors can insert a stent (a small mesh tube) that will keep the artery open and improve blood flow.

Coronary CT Angiography: This is a noninvasive angiogram of the blood supply of the heart, which gives doctors the same kind of information as a cardiac catheterization. In this procedure, the same dye used in cardiac catheterization is injected into a vein in the arm and pictures of your heart are taken in a CAT scan machine. Along with information about blockages, this test gives excellent information about early disease that is not yet causing symptoms. This information can help greatly with preventing the blockages from getting worse and causing heart attacks.

Coronary calcium score: For people who are not experiencing symptoms, this test can help identify early signs of cardiovascular

disease. Using a special X-ray machine, this procedure captures multiple pictures of the heart in thin sections. Combined, they can reveal specks of calcium build up in the walls of the heart's arteries.

Your Role in Managing Heart Disease

The choices you make every day impact your risk of heart disease. Your habits and lifestyle are not only your best defense against heart disease—they are also your responsibility. Here are several ways to recommit to a heart-healthy life:

Know Your Numbers

If you don't know what numbers impact your heart, it's time to find out. Talk to your doctor to see how your current numbers compare to what they should be. In general, the [American Heart Association](#) suggests these numbers as a healthy guide:

- total cholesterol less than 200 mg/dL
- HDL (good) cholesterol 50 mg/dL or higher
- LDL (bad) cholesterol less than 100 mg/dL
- triglycerides 150 mg/dL
- blood pressure less than 120/80 mm Hg
- body mass index less than 25 kg/m²
- waist circumference less than 35 inches

Be Familiar with Your Family History

If heart disease runs in your family, your chances of developing it go up. Talk to your parents, grandparents, aunts and uncles to better understand your genetic relationship with the disease.

Drink in Moderation

Moderation means [no more than one alcoholic drink a day for women](#), according to the Centers for Disease Control and Prevention. Any more than that can cause a spike in your blood pressure and in some cases lead to heart failure and stroke.

Don't Smoke (and Avoid Secondhand Smoke)

Statistics show smoking is a losing battle for women—in more ways than one. [Women who smoke are more likely to have a heart attack](#) than male smokers, according to Harvard Medical School, and their chance of having a heart attack doubles if they smoke as few as one to four cigarettes per day.

Additionally, women are less likely to succeed in quitting and more likely to start again if they do quit, according to the same source. Furthermore, many women experience inconsistent results with anti-smoking medications and don't find nicotine replacement as effective because their menstrual cycle affects tobacco withdrawal symptoms.

According to the American Heart Association, [smoking damages your heart](#) in these ways:

- Nicotine increases your heart rate and blood pressure.
- Carbon monoxide and tobacco prevent oxygen from reaching your heart, brain and arteries.
- Smoking damages the lining of blood vessels.
- Smoking increases the likelihood of platelets sticking together, causing blood clots.
- Smoking lowers your tolerance for physical activity and decreases HDL (good) cholesterol.

If you smoke and are ready to quit, visit beaumont.org/classes-events for a list of our stop smoking resources.

Also, remember even exposure to secondhand smoke poses a serious health hazard. According to a U.S. Surgeon General report, nonsmokers are up to **30 percent more likely to develop heart disease or lung cancer** from [secondhand smoke exposure](#) than those who avoid it completely.

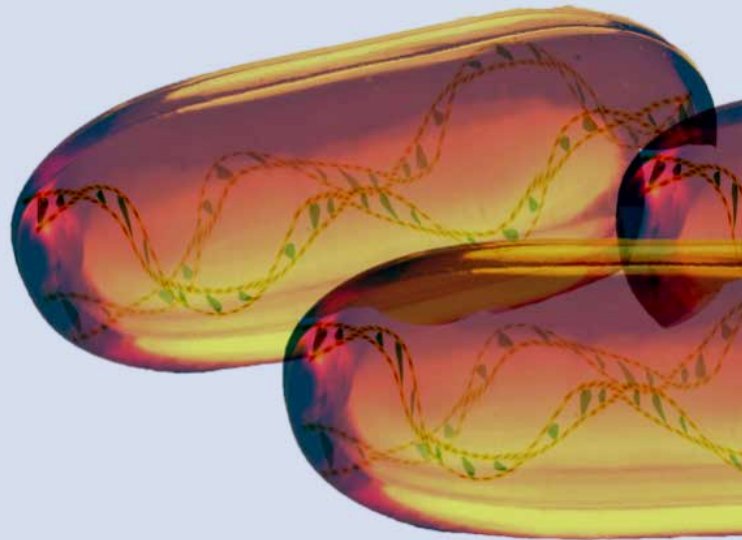
30%

Nonsmokers that are more likely to develop heart disease or lung cancer from secondhand smoke exposure than those who avoid it completely.

Manage Medications

Oral contraceptives and other medications can increase your blood pressure and put you at unnecessary risk. Based on your risk factors, discuss all treatment options with your doctors, and make decisions that are in the best interest of your overall health.

Additionally, know the current guidelines on hormone replacement therapy (HRT) and supplements. Dr. Chinnaiyan cautions that HRT and antioxidant supplements (such as vitamin E, C and beta-carotene) are not recommended to prevent heart disease in women.



150 min.

75 min.

Keep Moving

You know the drill. Exercise—and do it regularly. [How much physical activity do adults need?](#) To maintain overall health, the Centers for Disease Control and Prevention suggest adults do **150 minutes of moderate intensity or 75 minutes of vigorous intensity aerobic physical activity each week**. This could include brisk walking, jogging, cycling, swimming and taking the stairs at work. Remember, 10-minute intervals count!

Doing so can improve your blood pressure and HDL (good) cholesterol, reduce your chances of developing diabetes and strengthen your heart.

Eat Heart Healthy

What you eat matters to your heart. Foods high in sodium and fat can raise your blood pressure and negatively impact your cholesterol. Choose a diet that's low in sodium, low in saturated fat and high in fiber. Stay away from fatty meats, fried foods and sweets while eating colorful fruits and vegetables, fat-free or low-fat dairy products, lean proteins and whole grains.

The Office of Disease Prevention and Health Promotion, a division of the U.S. Department of Health and Human Services, suggests this as a [heart-healthy shopping list](#):

Fruits and Vegetables

- fresh fruit and vegetables
- dark leafy greens
- canned vegetables low in sodium
- canned fruit in 100 percent juice, not syrup
- frozen vegetables without added butter or sauces
- frozen or dried fruit that's unsweetened

Dairy Products

- fat-free or low-fat milk and yogurt
- cheese with three grams of fat or less per serving
- fat-free or low-fat soy milk with calcium

Breads, Cereals and Grains

- 100 percent whole-wheat bread
- whole-grain breakfast cereals like oatmeal
- whole grains such as brown or wild rice, barley and bulgur
- whole-wheat or whole-grain pasta

Meat, Beans, Eggs and Nuts

- seafood, beef and pork
- chicken and turkey breast without skin
- beans, lentils and peas
- eggs and egg substitutes
- unsalted nuts and seeds

Fats and Oils

- margarine and spreads (soft, tub or liquid) with no trans fats
- vegetable oil (canola, olive, peanut or sesame)
- non-stick cooking spray
- light mayonnaise
- salad dressings that are oil based instead of creamy

Stop Stressing, Find Balance

Stress has been linked to cardiovascular disease, even indicating that [women whose work is highly stressful](#) have a **40 percent** increased risk of heart disease compared with their less-stressed colleagues, according to a Harvard study. And that includes women working concurrent jobs—for example, caring for children, aging parents and other relatives while running a household and working outside of the home.

Self-care could include reading, gardening, spending time alone, or taking a class such as painting or yoga. Many studies have shown that [yoga and meditation](#) can have a positive impact on lowering a person's risk factors for and symptoms of heart disease.



40%

“Women need to work on self-care,” says Dr. Chinnaiyan. “That involves being mindful of symptoms and mindful of risk factors. Doing so ensures you are here longer to take care of everybody else.”

Schedule Your Annual Physical

Often women put others' needs before their own, which causes their health to suffer.

"They ignore symptoms ... because they are busy taking care of everybody else," Dr. Chinnaiyan says. "These are the same women who immediately rush their husbands off to the hospital if they have the same symptoms. It's this cultural, longstanding mindset that almost speaks to women's inability to take care of themselves as a virtue. That is something we need to change as a medical system and community of physicians. You really must take care of yourself so that you can take better care of others."

Strive to have a heart health screening every year. These tests could include:

- [weight and body mass index](#)
- [waist circumference](#)
- [blood pressure](#)
- [cholesterol](#)
- [heart exam](#)
- [fasting blood glucose](#)

Schedule regular visits with your doctor and make it a priority to keep them. With routine tests, your doctor will be able to track your numbers and know when he or she needs to adjust your treatment.

Between visits, call your doctor if you develop new symptoms or your current ones worsen. If applicable, talk to your doctor about using low-dose aspirin to lower your risk of heart disease and stroke.

Watch for Heart Attack Warning Signs

Subtle symptoms can warn you before you are in the middle of a full-blown attack. If you think you're having a heart attack, immediately call 911. Early treatment can prevent or limit heart damage and save your life.

Choosing a Health Care Partner for Your Heart

Early detection and diagnosis are key to defeating heart disease. When choosing a health care provider, it's important to find an experienced partner you can trust.

Beaumont was the first hospital system in the state of Michigan to open a women's heart care center dedicated to the detection, prevention and treatment of heart disease in women. In addition to traditional cardiac diagnosis and treatment services, the [Ministrelli Women's Heart Center at Beaumont](#) offers thorough evaluations, specialized exercise classes, and complimentary diet, lifestyle and fitness consultations. It's a place where women are not only treated but heard.



Heart Health Offerings

A few of Beaumont's cardiac programs include:

7 for \$70 heart and vascular screening*:

Beaumont created an affordable screening package that includes seven tests designed for people who are not experiencing symptoms, but have several heart risk factors, such as high blood pressure, high cholesterol and heart disease in their family history. The program helps doctors understand how aggressively they need to treat a patient's risk factors. "You get seven tests for \$70," Dr. Chinnaiyan says. "I recommend this quite frequently for individuals who are not having symptoms."

Cardiac rehabilitation: This program is designed for people who have experienced a cardiac event, procedure or diagnosis such as a heart attack, angioplasty, stent, bypass surgery, chronic angina and chest discomfort, a heart valve procedure, congestive heart failure, or a heart/lung transplant. Rehabilitation doesn't change the past, but it helps patients improve their heart's future through exercise and education.

Calcium scoring heart CT*: This radiologic test can help identify early signs of cardiovascular disease in people who are asymptomatic. There are strong correlations between heart attack and dying of cardiovascular disease in the next 10 years in people who have calcium build up in their coronary arteries. This knowledge can help motivate patients to make changes and stick to healthy lifestyles.

Ministrelli Women's Heart Center: During the first visit, patients get a thorough evaluation using a detailed questionnaire that gathers information about individual risk factors, genetic histories, lifestyle choices and social habits. As part of their care, women can also meet with a dietitian and exercise physiologist for personalized nutrition and fitness counseling. These services are in addition to the typical testing that is done to diagnose heart disease, such as echocardiography and stress tests.

*Because these tests are screening (for patients who are asymptomatic) and not diagnostic (for patients who are symptomatic), they are not covered by insurance. For that reason, Beaumont created an affordable and effective set of tests that can potentially save money – and lives.

For more information on these programs, and all of Beaumont's heart and vascular services, visit www.beaumont.org/womens-heart, or call 800-633-7377 for a referral to a Beaumont cardiologist.

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